

CVCP may call for tough English tests

by David Walker

The Committee of Vice-Chancellors and Principals is likely to set up a working party that could recommend a stringent new test in English language to be taken by all overseas postgraduate students entering higher education.

The move comes after several universities have tightened up their entrance requirements for overseas students and expressed dissatisfaction with some of the existing language tests run by the British Council. Earlier this month the first results of a new examination organized by the General Medical Council for foreign doctors showed a startlingly low rate of success.

The mounting cost of remedial English classes and the difficulty of running one-year masters' courses with students with inadequate command of English have prompted the Council for Foreign Examinations to revise their matriculation requirements and others, like Imperial College, London, to consider new and better tests.

The idea of a language test common to all universities, discussed in recent weeks by officials of the British Council and the CVCP in a series of joint meetings, was first mooted in a paper from the Cambridge University Board of Graduate Studies.

The test to be taken at home or abroad—perhaps through the examinations machinery of the Cambridge Local Examinations Syndicate—would give the student a

"profile of competence" which his intending university or college could read in the light of their individual entrance requirements.

Some universities feel the students they receive at present through the British Council mechanism have too varied an ability to understand courses. Worse, it is not till a student begins his studies that a lack of knowledge of English is discovered and the university can start remedial teaching.

However, many universities, like Edinburgh or Reading, are confident about their own tests. Reading requires students to take a test on arrival, some months before the course starts. This gives them a margin for intensive tutoring if it is needed.

The British Council is understood to favour some general assessment through its ambit extends to all overseas students coming to Britain at all educational levels. It argues that a battery of tests for different levels of competence is needed.

Officially the CVCP is still examining a range of possible tests, though it admits to a general concern at some of the existing arrangements for making sure students can actually understand the courses they come to Britain to take.

There is a strong pressure group within some universities, like Birmingham and Manchester which have devoted much research and teaching time to the problems of overseas students' language competence, to set up some form of uniform test.

'Give priority to young blacks in FE colleges'

by Sue Reid

Further education colleges must give priority to the needs of young black people if they are to fulfil their essential role in society, Miss Jocelyn Barrow, a lecturer at Purzdown College of Education, London, said this week.

Speaking at a conference at Goldsmiths' College, London, on the further education service in a multi-racial community, Miss Barrow planned further education colleges had moved away from the role of providing a second chance for young people and were now becoming purely academic institutions.

She felt priority clients within the further education system were the minority groups. Young black people often faced the same barriers to further education that they had faced at school.

"Further education had an extremely important role and responsibility for black minority groups in channelling their abilities in the right direction and it must restructure its programmes to meet their needs. If the further education service fails to do this, the alienation and confrontation will be disastrous. We need more than isolated experiments in a few colleges", said Miss Barrow.

A continued programme was needed to look at communications and language skills, provide courses which gave an introduction to various careers and set up foundation

courses to help people fill the gaps in their education. Staff should be trained for the work and colleges should go out to the black minority communities to find out what the specific needs were.

Miss Barrow added that communication skills were a crucial area in the further education of minority groups. Verbal education was essential and intensive language courses should be provided.

These should not be approached in the same way as when dealing with young children of illiterate adults, because the language problems of black minority groups were complex.

Miss Barrow criticized the anti-discrimination legislation of the 1960s as a barrier to improved race relations. She claimed race relations in Britain were deteriorating because so often, black people were made to feel unwelcome.

The welfare and social problems facing young blacks needed to be looked at within the further education system. Lecturers had to examine their attitudes to ethnic groups and the different cultures of minority groups should be catered for by schools and further education institutions. The culture conflict was a serious problem.

black studies in further education and specialized in-service training for teachers dealing with ethnic minority groups, in the first, to link further education and the multi-racial community.

12 staff and no students

from page 1

gets £2.2m, or about 20 per cent of its total income.

The gross figure for all universities for the year 1972-73 was £1.14 in the academic year 1972-73, a slight change from the previous year's £1.81. The proportion of "senior staff" — those above senior lecturer level — increased slightly, making professors nearly 10 per cent and senior lecturers nearly 22 per cent of the total.

The bulk of the professional staff were aged 40 and over and were located in Oxford, Cambridge, Birmingham, Manchester, Edinburgh and London.

The gross figures for the quinquennial beginning in 1967 also showed quite clearly how "supplementation" of university income has taken account of price changes has grown in importance in recent years. From just over £7.6m in 1969 the grant for price increases other than academic salaries increased to nearly £35m in 1972-73.

The position of women in all parts of the educational system remains subordinate, though there have been significant changes in the proportion of women in the student total. From just over 18 per cent in 1962 the figure increased to over 30 per cent by 1972-73.

Statistics of Education, Vol. 6, Universities (HMSO, 34.75).

Pace eases on London reform Bill

by Laura Kaufman

London University has almost certainly abandoned its plans to submit to Parliament this autumn a private Bill which would enable it to reform its constitution.

A senate debate is to take place on the timing of the proposed Bill next Wednesday — a most exceptional occurrence since the last full-scale senate debate was during the student troubles of 1968.

The main aim of the Bill would be to free the university from one section of the University of London Act, 1926. This would enable the university to make the vice-chancellor the full-time salaried academic and administrative head of the university with a possible term of office of eight years and make the principal responsible to him.

Last Friday the university's consultative committee, which represents all academic interests including all the heads of colleges, recommended to senate that it should consider the timing of the proposed Bill and that there should be a debate on the timing.

Mr Peter Griffiths, secretary of the consultative committee, said the committee had been divided over the timing but had endorsed its aims. "It was recommended that the senate circulate the draft Bill to the colleges. No final decision will take place until October, after they have been consulted."

There is a movement among some of the major colleges to secure a moratorium on the Bill at least for this session in order to allow time for internal debate and discussion. It is now obvious from the time-table of the senate debate and the university's plans for consultation that a Bill will not be submitted this autumn.

'Make up minds on use of computers'

If educationalists did not themselves decide how computers should be used, then the computing industry would do it for them, Mr Richard Hooper, director of the National Development Programme for Computer Assisted Learning, warned last week.

Mr Hooper was presenting the first public report, *Two Years On*, of the Action Plan government-funded programme.

It states that in the programme's second phase, particular attention will be paid to making recommendations to appropriate agencies in the public and private sector, concerning possible future levels and types of investment in computer-assisted and computer-managed learning.

The range of projects and studies underway are also described. The 17 projects at the end of 1974 involved well over 100 academic staff in some 30 different educational institutions in the United Kingdom.

Among other generalizations the report says that in the foreseeable future the main uses of computers, as now, will be for research purposes and for the teaching of computing. The use of the computer as a laboratory or simulator will develop unerringly, but the future of the computer as a teaching machine remains uncertain.

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Second polytechnic appoints professor

Ulster College, the Northern Ireland Polytechnic, has appointed its first professor, only the second polytechnic in Britain to do so, the fifth being the Polytechnic of Central London.

Dr Donald McCloy, professor of aeronautical engineering, is to join the polytechnic as director of studies and head of the School of Mechanical and Industrial Engineering, with the title of professor.

Lancaster sit-in students win sentence appeals

by Tim Albert

The 30 Lancaster students sentenced by a senate committee for taking part in the recent sit-in at the university have won their appeals.

In what must be seen as a serious criticism of the way that the senate has dealt with the troubles, a committee of appeals and equity under Lord Morris of Gramere has said that the tribunal which sentenced the students was unconstitutional.

The first two propositions were upheld unanimously; the second two upheld by two votes to one.

"We are unanimously of opinion that it was not legitimate for the senate on March 17 to take any action which would be to change the nature of the first court below which students were to be charged."

"We consider that there was a real likelihood of bias so far as membership of the committee was concerned. In particular, we consider that this real likelihood existed in relation to the question of penalties to be imposed for taking part in the occupation."

On the other two questions the committee reported: "In the judgment of two of us the exclusion ordered by the senate as a penalty or at least partly as a penalty, of the principles of natural justice were infringed."

"Two of us further consider that the exclusion of students from meetings of the senate on March 17 and 18 was improper and that a resolution of March 17 setting up the disciplinary committee was invalid."

Commenting on the finding, Victor Adereth, the president of student union, said that he was glad the decisions as a vindication of their assertion that senate had acted hastily.

Lecturer's unfair dismissal claim upheld

The Association of Scientific, Technical and Managerial Staffs has won its claim against University College, Swansea, that a probationary lecturer in the college's department of philosophy, Mr Mike Weston, had been unfairly dismissed.

The union had claimed that the college's decision to refuse tenure to Mr Weston at the end of his three-year probationary period was taken largely on the grounds of his trade union activities, and in particular because of his presence on picket lines during a strike by postgraduate students.

An industrial tribunal, meeting in Cardiff last week, supported the union's claim of unfair dismissal. In particular, the tribunal stated that the college had been wrong to demand an assurance from Mr Weston that he would not take part in further disruptive activities, such as the picketing of college buildings.

It is not yet known whether the college is to appeal against the decision, which is to be discussed at a meeting of its council on Monday.

After the judgment, Mr Weston said: "This decision has vindicated the claim that a 'strong trade union' is necessary in universities to protect the interests of younger members of staff."

He added that although the tribunal had not been asked to award damages, he would be asking for compensation for the loss of earnings and for the teaching of computing. The use of the computer as a laboratory or simulator will develop unerringly, but the future of the computer as a teaching machine remains uncertain.

Unexpected support for Government pay policy

The national council of the Association of Teachers in Technical Institutions has decided by a majority of one to override its executive committee's advice, and support the Government's pay policy.

At a meeting last weekend the council, after a long and heated debate, secured a vote in favour of the Government's pay policy.

The union's representatives at the meeting were disappointed that the union's support for the Government's pay policy was not unanimous.

An original motion proposing a percentage increase in pay was defeated by a narrow margin.

NELP governor quits over course closures

Mr David Warren Piper, head of the London University teaching methods unit, has resigned as a governor of North-East London Polytechnic in protest over the closure of the polytechnic's art and design foundation which recommended the Government to retain the foundation course system.

New post for Sir Alex

Sir Alex Smith, director of Manchester Polytechnic and chairman of the committees of Directors of Polytechnics, is to take over as chairman of the Schools Council in October.

ATCDE merger ballot gets huge 'yes' vote

The Association of Teachers in Colleges and Departments of Education has voted for a merger with the Association of Teachers in Technical Institutions by 3,119 to 567.

More than 350 ballot papers were declared invalid when members failed to sign their names in the back of the envelopes, in which they had to be returned.

But this week Mr Kenneth Bell, general secretary of the ATCDE, said that the union's support for the merger was as high as anticipated. ATCDE members will vote on the proposed merger in October.

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Close some universities to protect the cream, v-c says

by David Walker

A senior vice-chancellor broke ranks last week and suggested that a number of new universities and polytechnics might have to be closed in order to preserve a few quality institutions and centres of excellence.

Dr Robert Hunter, vice-chancellor of Birmingham University, called for "special treatment" for the four elite universities of Birmingham, Leeds, Liverpool and Manchester to maintain their unique position in research and advanced degree courses.

In a week of major speeches defending universities against the Government by Mr Jo Grimond MP, chancellor of Kent University, and Mr Norman St John-Stevens, MP, the Opposition spokesman on education, Dr Hunter's remarks stood out.

They marked a significant break from the views of both the University Grants Committee and the Committee of Vice-Chancellors and Principals.

Sir Arthur Armitage, chairman of the CVCP and vice-chancellor of Manchester University, told *The Times* that it was absolutely "contrary to the needs of higher education to close any university or polytechnic. In October there would be nearly 10,000 more students than in 1974 and 17,000 more than in October, 1973.

Despite a hint by Mr Grimond that he, too, saw the need for "one or two" universities to be closed, sources in the UGC and the CVCP were adamant that there was no "emerging conventional wisdom" on this question.

The UGC is understood to consider Dr Hunter's view too simple. In hard times the way to maximize the service given to students is not thought to be closure, which would entail the loss of high quality places outside the pecking order implicitly suggested by Dr Hunter.

His fellow vice-chancellors do not feel his sense of urgency. Mr T. C. Thomas, vice-chancellor of Liverpool University, said that things had not got to the point where new universities had to be closed or one institution helped at another's expense.

It is understood that an attempt to apply Dr Hunter's calculation to the Scottish universities would be fiercely resisted, particularly during



'I didn't mean it', says Crowther-Hunt

by Alan Cane

Lord Crowther-Hunt, minister of state overseeing higher education, this week denied that he set out deliberately to attack the universities in a speech delivered to the annual conference of the British Students' Health Association.

He explained that newspaper reports of his comments on bad lectures, poor construction of courses and bewildered students had missed the point. He was not casting doubt on the quality of the universities, but questioning whether they were yet doing enough to prepare for the increase in student numbers he was taking place up to the year 2000 and beyond.

He was not arguing that more had meant worse, he said, but that more would mean different and he did not see enough signs that the universities were making changes fast enough.

His disingenuous remarks came ironically at a time when Whitehall and Westminster have never been more sensitive to accusations that they are prejudiced against the universities.

Ministerial speeches to or about

the universities are now expected to contain reassuring comments of the kind exemplified by Mr Wilson in his speech to the London Business School two weeks ago.

Mr Norman St John-Stevens, opposition spokesman for education and the arts this week accused Lord Crowther-Hunt of setting out to destroy the freedom of the universities, a clear reference to the minister's advocacy of manpower planning techniques in higher education.

On Monday Lord Crowther-Hunt said that two crucial issues were raised by the expected growth in the numbers entering higher education.

The first is whether the traditional university teaching methods are suitable for the increasing numbers of students who have come and will increasingly be coming forward. Let me make it absolutely clear that I recognize that universities are autonomous institutions and no one should tell them what or how to teach," he said.

"But it does seem to me that those concerned will need to give a great deal of thought to whether traditional university teaching is now and will in the future cope with

the needs of the modern and future generations of university students.

"Now, as I understand it, very little basic research has been done into the problems of teaching and learning in higher education. It is crucial, in my view, that we should get on with such research — given the expansion we have had."

Meanwhile we also need to recognize — and here I put my teaching hat on rather than my ministerial one — that students very often need much closer academic attention than they often receive and methods of instruction, teaching and even examination which also produce a regular rhythm of work.

"All this, then, is linked with the second question which the explosion of numbers makes us focus on the question of motivation. We often hear tutors complaining about their apathetic students. Such research that has been done on this shows that major contributory factor are bad lectures, poor construction of courses — or an inability to see the course direction — a feeling of floundering in a hopeless mass of often unrelated material — and uncertainty about standards required which all leads to bewilderment, floundering and apathy."

Universities exempt from Land Bill

Universities and charities are to be exempt from the Government Community Land Bill, Mr John Silkin, Minister for Planning and Local Government, announced on Tuesday.

The committee of vice-chancellors and principals said they were pleased that the Government had responded to their representation, made on behalf of the universities, who, in turn, would be pleased with this outcome.

civil service encroachment partly by means of publicizing their essential purposes better.

Mr St John-Stevens gave a strong hint that the next Conservative government would restore full supplementation for inflation and declared his faith in the principle of the block grant system of finance. He said the Conservative Party was unrepentantly and unreservedly pro-university.

Mr Grimond warned university teachers of the dangers of embracing parity with the civil service in their salary claims. This could lead to control by the civil service, he said, and there were dangers, too, in university teachers becoming trade unionists.

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New SSRC secretary appointed

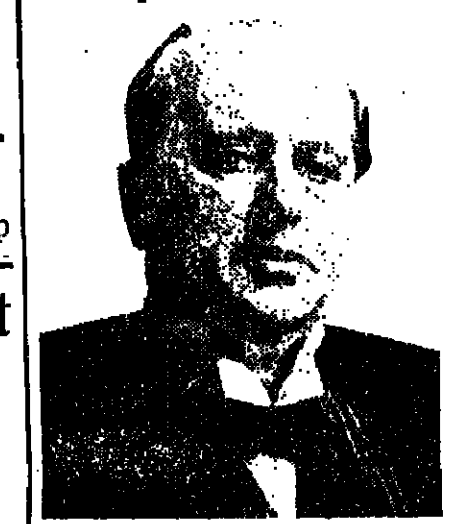
The new secretary of the Social Science Research Council is to be Dr Cyril Smith, a lecturer at the Civil Service College. Dr Smith, who takes up his position in October, was chairman of the British Sociological Association last year.

THES circulation rises

The average weekly circulation of *The Times Higher Education Supplement* from January to June this year was 19,865, compared with 18,753 in 1974, an increase of 1,107 copies a week. The average weekly circulation in June was 19,750, compared with 18,051 last year, an increase of 1,699.

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Government to cut its support for Cranfield

by Alan Cane

Government finance for Cranfield Institute of Technology is to decline over the next three years. Its triennial recurrent award has been announced as—1975/76: £3,023m; 1976/77: £2,905m and 1977/78: £2,866m.

The figures are at mid 1975-76 prices and the Government has warned the Institute that while the figure for the first year is certain, the second and third year figures are to be regarded as maximum sums, liable to reduction by any Government cuts in public expenditure. Supplementation will be given as in the past.

Cranfield is a unique feature of British higher education. It is wholly postgraduate and it is funded directly by the Department of Education and Science on a triennial basis rather than through the University Grants Committee.

The Cranfield Reporter, the Institute's newsletter, says: "The grant is based on a growth to 750 long course students and 240 full-time equivalent short course students by 1977/78. In awarding it, the DES has asked the Institute to aim at a staff: student ratio of 1:6 compared with the present level of just under 1:5."

In 1973-74 there were 560 full-time students and the DES grant was £2,488m. Of the total income in 1973-74, £1,143m or 24.5 per cent came from research grants and contracts both from industry and industrial departments.

In making the triennial award, the Government has made it clear to Cranfield that it expects the Institute to find a larger proportion of its funds from industrial and other research work and consultancies.

The newsletter says: "The Department has suggested that by 1977/78 the Institute should be able to reduce its staff and that charges on short courses and research be progressively increased so that short course income represents at least two-thirds of their economic cost while the full cost of research for industrial sponsors be recovered from these sponsors."

Senior university administrators



Cranfield: progressive cuts ahead.

were puzzled this week that Cranfield had been allowed a three-year forward look to assist with planning while other universities were living from year to year.

There were also forebodings that Cranfield's declining grant is an indication of what the other universities might expect when Government decisions on higher education expenditure cuts are known.

Cranfield is, however, a special case. It has long wanted to make itself as independent of Government support as feasible and has been building up its research and consul-

tancy work at an average rate of 15 per cent a year. Second, as a wholly postgraduate institute, Cranfield is vulnerable to changes in Government opinion about numbers and costs of postgraduates.

At present the Institute's income from research and short courses is about 40 per cent of its total recurrent income. In its annual report published earlier this year, it expressed anxiety about research council grants which did not cover overhead costs. Too many such projects would mean that the Institute outgrew its available resources.

Repayable, voluntary grants system proposed

The present system of student maintenance grants should be replaced by a repayable, voluntary grants system, according to a report by the University Grants Committee.

Mr Richard Layard, director of the London School of Economics unit for research into the economics of higher education, made this recommendation in a recent report, *Analysis*, called "Quality Challenge".

Mr Layard said taxpayers increasingly resent paying large maintenance grants and tuition to universities who were on average more talented and likely to do higher life-time incomes than average taxpayers.

He had already been in favour of a higher proportion of students going to university after some experience of life, particularly arts and social sciences. But older people came into the picture as an issue dodged by a whole generation of governments, students would have to be faced.

If someone in his thirties, wife and children, was going to university, he would need a student living not provided by the student maintenance grant.

Mr Layard suggested: "Keeping grants as we have had them of no consequence to the student will be eroded by inflation, introduce on top of them a percentage of conditional grants where the student for each hundred pounds he took, and he could choose an undertaking that he would contribute to the cost of one of his children's education in the form of income tax."

This would benefit every student, because they could set their standards of living to their parents were not paying university fees.

'House a student' drive launched

Students at Newcastle Polytechnic have launched a campaign to "House a Student" to combat student housing problems.

During the past two weeks, leaflets have been pushed into letterboxes in Tyne-side and householders if they can spare a room for a student.

The campaign has been jointly financed by the Newcastle Polytechnic and the local authority. Ten per cent of the normally spent on advertising to attract more students to the polytechnic has been contributed.

Mr Howard Lyon, the accommodation officer, who is also chairman of the National Association of Accommodation and Welfare Officers, said that the association was interested in raising the idea of a national level of design course.

An advertising campaign in local press will take place in August and September and the beginning of the autumn term. The advertisements, which were designed by the students,

University closures proposed

The precarious financial situation of the universities was highlighted in speeches by three eminent figures this week. Dr Robert Hunter and Mr Jo

Grinstead both warned that some might have to be closed. Mr Norman St John-Stevens feared this Government wanted them bankrupt. David Walker reports.

'Preserve some quality'

Some of the new universities and polytechnics might have to be closed in order to preserve a few "quality institutions", Dr Robert Hunter, vice-chancellor of Birmingham University said.

Making an unashamed plea for the special recognition of the great universities of Birmingham, Leeds, Liverpool and Manchester, Dr Hunter warned that the country's economic recovery was jeopardized by the educational policy of spreading grants and resources across the board.

"We have earned, and in the national interest deserve, special treatment in the way of provision of staff and resources," he said.

"This is elitism against the current vote-catching egalitarianism. I know someone will have to do without to make it possible, but the decision has to be made and made soon — are we going to have a few centres of excellence among the institutions of higher education?"

Speaking at a dinner for Birmingham graduates Dr Hunter combined his special pleading on behalf of the universities with an attack on several strands in the education policy of the present government, including the devaluation of the University Grants Committee and Lord Crowther-Hunt's emphasis on part time courses.

One of Birmingham's major problems was accommodation. Despite

recent building the university would have to build more halls and student flats and numbers of students would have to be restricted to those it could provide for. He asked whether the Birmingham Polytechnic would do the same.

Research was threatened in all the major civil universities with what he called their unique provision for advanced degree courses and research. Dr Hunter cited research work at Birmingham on sonars that had made North Sea oil exploration possible.

No one foresaw the exact application of this research when it started. Some of the 'practical' men and women of town hall and Whitehall think this kind of research is dangerous or wasteful or that the moon rock on which we are doing fundamental research about the structure of the moon is of no practical value. Not today — but what of tomorrow?

"The great cities of Manchester, Leeds and Liverpool have a similar situation to ours. We are expensive universities with facilities and resources carefully garnered over the years — garnered not for indulgence and privilege but to serve this country in the way we think best."

"I must tell you that we are now beginning to consume the seed corn. A decade could see this institution reduced to the level of being unable to discharge its research function... unable even to maintain its



Dr Robert Hunter

specialized training and research services to British industry."

Birmingham and the others were not, Dr Hunter said, over-ambitious. They had sufficient income of their own to be able to weather the attempt to wreck them, and they needed special protection.

Dr Hunter hinted that some of the undertakings given by the Government in its early 1960s about the UGC and the block grant principle had been jettisoned.

"The climate of the UGC has substantially changed, and although I think everyone would accept that those at present concerned, and particularly Sir Frederick Dainton, chairman of the UGC, sincerely try to do their best, they do so under what may be almost impossible circumstances."

In recent years one of the universities' bulwarks, in the block grant principles, had been significantly weakened with possibly more detrimental changes to come in the future.

'Present numbers not sacred'

But at the same time the universities themselves had to be a little introspective and recover their proper base. These were freedom from control by governments and bureaucracies and the pursuit of excellence. Universities had to fight misguided attempts to reduce them to some lowest common denominator.

"Universities are not ivory towers. I detect in some quarters an attempt to divide higher education into theoretical and practical. The practical would be polytechnics. The theoretical would be universities. This ignores the obvious fact that universities are the main centre of medical and engineering research, not to mention other practical facilities."

Mr Grinstead had a special word for the civil service. He warned of the greater danger of the university being sucked into it. If academics' salaries were assimilated to the civil service they might find themselves under its control.

Further, I suspect there is going to be a revolt against the quite unjustifiable situation which the Civil Service has achieved. It is really absurd that they have

retained complete security, freedom from criticism, non-contributory pension indexed to inflation and rates of pay above university teachers in other European civil services."

Universities ought to take more control of their own salaries and perks and allow a degree of variation to get in. Everything, Mr Grinstead said, was becoming too centralized and uniform. Inflation was forcing university teachers to become trade unionists which up to a point was justifiable, but beyond that could be disastrous.

"We can see the chain of events all too well. The central authorities, ministers and civil servants will say that university education is something of a luxury. They will have you believe, though I suspect against a great deal of evidence, that polytechnics are cheaper. However, they will graciously dispense some more funds to the universities, but only at the price of getting their hands more directly upon them."

Mr Grinstead concluded that the universities had to do much more to mobilize the influential body of opinion outside their walls which was more and more concerned with their future.

'Protect freedom, autonomy'

"They have served the nation well: the employment by industry and commerce of university graduates and the wide consultant function of university teachers is testimony to the fact that universities are relevant to the needs of the outside world and, indeed, are centres for advice, information and the practical application of ideas."

Mr St John-Stevens began his speech to the National Association of Conservative Graduates with a eulogy of the British universities and of the close connection between them and the Conservative Party.

"Our universities have given us the best first degree in the world and one that can be achieved in the shortest time. The wastage rate of students is among the lowest in the world. Over the past decades the universities have carried through a massive expansion without any lowering of standards."

Nevertheless, the universities had some responsibility to those who could not get into them. He talked about making more use of the university of the air and of greater scope for sharing staff and facilities between universities and polytechnics.

He accepted that cuts in spending were necessary while criticizing heavily the way the Labour Government had gone about them. He said cuts ought to be evenly distributed with the universities making their share of sacrifices but no more than a fair one.

Lord Crowther-Hunt and the Labour Government had used the hatchet, attacking university autonomy and their right to offer the courses they thought fit.

"Lord Crowther-Hunt's proposals for manpower planning in higher education are utterly antipathetic to the ideal and to the reality of the university. It can't be said about today's relevance is tomorrow's irrelevance."

The Government seemed intent on bankrupting the universities, expecting them to meet ever increasing prices without a supplementary grant. He denied them the essential element of stability for forward planning.

University teachers were discriminated against so that a lecturer got between £600 and £1,000 less than his equivalent in a polytechnic. Mr St John-Stevens said the Government was not prepared to pay for equal work but the present policy was rank discrimination.

County verdict threatens Hereford cuts

by David Hencke

Hereford College of Education now looks likely to lose all its teacher training places by 1979, after the Hereford and Worcester County Council last week overturned its education committee's decision to end teacher training at Shenstone New College, Bromsgrove.

The decision was taken at a tense meeting of the county council on Thursday. The county will now inform the Department of Education and Science which has the final decision.

Originally the DES favoured the closure of Hereford but officials' advice was overruled by Lord Crowther-Hunt, Minister of State for Higher Education, after receiving a delegation from the college.

Both the further education sub-committee and the education committee, who were given a choice of closure by the DES, favoured retaining Hereford.

A secret ballot of county councillors showed that voting was split 42:42. At the county council meeting the chairman refused to use his casting vote so a revote was ordered. The final voting was 44 in favour of retaining Shenstone and 40 in favour of Hereford.

Dr Dennis Brailsford, principal of Shenstone New College, welcomed the county council's decision but added that he was not cautiously optimistic and was awaiting a final DES decision before celebrating.

The college has also received approval from the DES to launch a Diploma of Higher Education course from September.

Charlotte Mason College of Education, Ambleside, is to be one of the few small, mono-technic colleges to survive reorganization. The Government has agreed to final plans submitted by Cumbria Education Authority to retain the college with 300 places.

A letter from the DES says that its new courses of validation from the University of Lancaster, in geographical location and its in-service population of the Lake District contributed to the college's treatment as a special case.

The DES has approved the establishment of the Rochester Institute of Higher Education, a new federal college consisting of former Anglican, Methodist, Roman Catholic and interdenominational colleges in south-west London.

The new college will be formed from Digby Stuart, Southlands, Whitehall and the Froebel Institute. By 1981 it is hoped that more than half the 3,000 students at the new college will be studying for Diplomas of Higher Education and degrees outside teacher training.

Proposals to rename the new institution replacing Bishop Cleeve College and Derby College of Arts and Technology, the Derby Lonsdale College of Higher Education have been sent to the DES.

The college will be a unique combination of an existing local authority advanced college of technology and an Anglican college of education.

By 1981 it is planned to provide courses for 3,000 students.

'Give overseas students own minister'

by Frances Gibb

A minister should be appointed with specific responsibility for overseas students, Mr Philip Mason, retiring chairman of the United Kingdom Council for Overseas Student Affairs, said at its annual conference in London this week.

Government departments were willing to help UKCOSA, but little progress could be made without specific support from one minister. "We cannot really make much progress until we can get in the Government a real desire to do something about overseas students. This might well be expressed by the appointment of a minister who would make this his special interest and accept the public role as champion for overseas students."

The present climate was unfavourable to such a suggestion, he said. "All over the country is brewing up a spirit of national hostility to students, and still more to foreign students. People do not perceive the advantages overseas students bring us, and our cause is a difficult one to sell in a few words."

On the question of the fee differential for overseas students, he said that while there was discrimination in the country at large, UKCOSA's job was to address itself to its particular concerns and apply government pressure in that area.

Mr Trevor Phillips, a delegate from the National Union of Students, maintained that discrimination in fees was helping the wealthier countries at the expense of the less well off.

Mr John Grant, parliamentary under secretary at the Ministry of Overseas Development, reaffirmed the ODM's policy to help the poorest countries, and also those most affected by rapid price rises in vital materials such as oil.

The proportion of overseas students in this country was 10 per cent of the student body, which was higher than in almost any other country, he said. There are 100,000 overseas students here at present.

While this brought problems, overseas students brought advantages in that they helped our institutions "to maintain their excellence and their worldwide view."

Open University degree costs

The costs of taking Open University degrees were wrongly stated in article "Attractive to the children of workers" (THESE July 4).

The latest analysis shows that in 1965 it cost £422 to take the cheapest form of ordinary degree and £752 to take an ordinary science or technology degree. It cost £581 to take the cheapest form of honours degree and £1,076 to take an honours degree in science or technology. These figures included fees and ancillary costs.

The OU survey research department reports evidence that cost is a severe disincentive to potential working class students.

Commission on Edinburgh's role established

Mr Gordon Brown, rector of Edinburgh University, announced last week that an independent commission would be set up to examine the responsibilities, accountability and government of the university in relation to present and future local, regional and national educational requirements and community needs.

The commission is to be chaired by Councillor George Foulkes, director of Age Concern, Scotland, chairman of Lothian regional education committee and of the education committee of the Convention of Scottish Local Authorities. Members will include Mr John Pollock, general secretary of the Educational Institute of Scotland, and two MPs — Mrs Margaret Bain (Scottish National Party, Dumfriesshire) and Mr Dennis Canavan (Labour, West Strathclyde).

From within the university there will be one nominee from each of ASTMS, AUT, NALGO and NUPE, and two from the General Assembly of Academic Staff. Participation of the AUT and NALGO is still to be confirmed. The rector will be a member.

The general council of the university has nominated Dr R. A. Wall, chemistry department. Mr Brown said the commission would make its first report in October. This would allow it to present an observation on the draft ordinance on the constitution of the court in time for the court's November meeting.

In preparing their submission to the constitution and structure committee, set up by the court, Mr Brown and the students' representatives which went much further than those of that committee, and than those adopted for the draft ordinance.

Honorary degree for Times chairman

Mr Denis Hamilton, chairman and editor-in-chief of Times Newspapers Ltd, was awarded an honorary degree of doctor of letters by Southampton University last Friday.

Mr Hamilton, who was also awarded a Professor Sir Clem Moser, director of the Central Statistical Office and chairman of the Board of Directors of the Royal Opera House, Garden, Dr Manfred Lachs, president of the International Court of Justice, the Hague, and Miss Olive Kimber, treasurer of the University of Southampton Society. The degrees were conferred by Sir Eric Roll, chancellor of the university.

President Hamilton for his degree, Professor J. S. Bromley, of the history department, said that the five newspapers published by Times Newspapers Limited must now account for a third of all serious book reviews.

The launching of *The Times* four years ago has bridged the increasingly artificial gulf between Fleet Street and academics. We now know how heavily *The Times* Library supplements relies on universities and the academic world.

'Disastrous' to change medical training without extra funds

It could be disastrous if changes in medical education, made necessary by implementing the Morrison report, were rushed through without adequate extra finance, a senior medical educationist said in London this week.

Speaking to a specially arranged conference of the Association for the Study of Science Education, Dr J. P. N. Mounsey, provost of the Welsh National School of Medicine, said the changes would require considerable extra finance which would have to be provided by the University Grants Committee and the Department of Health and Social Security.

He thought it was ironic to be discussing such expensive changes in the middle of a severe financial crisis. In particular, he believed it was more important to improve the quality of the existing pre-registration year than to introduce the "graduate clinical training" proposed by Morrison.

The committee chaired by Dr Alex Morrison, vice-chancellor of Bristol University, published its report on the regulation of the medical profession earlier this year. While specifically concerned with medical education, its proposals for the reform of the General Medical Council, if adopted, would inevitably mean far-reaching changes in the education of doctors, costing money and requiring extra teachers.

In particular it proposed that undergraduate training for doctors should be shortened by a year and, in exchange, graduate clinical training should be lengthened.

Dr Mounsey argued that the introduction of these changes would have serious consequences for undergraduate medical education. He warned that a shorter undergraduate training period, with the present staffing situation in the medical schools, could lead to lowered standards.

He also pointed out that there was already a shortage of posts for students taking pre-registration training; the introduction of graduate clinical training would mean finding twice as many and there was danger of a log jam of graduates waiting for suitable posts.

Dr Morrison, opening the conference, emphasized the importance of the proposed education committee of the General Medical Council.

It alone would look after the education of doctors as a whole and it would be composed of six representatives of the university medical schools, six representatives of the Royal Colleges and six representatives of the elected members of the reformed GMC.

Everybody at the conference was aware of the problems of resource shortage. Dr Morrison argued that his resources required were easily quantified but the benefits obtained were difficult to measure.

He was cynical about arguments put forward by economists whose intervention he felt had had negative effects.

DES backs down on closing poly teacher training

by David Hencke

The Department of Education and Science has abandoned its plans to close initial teacher training at Huddersfield Polytechnic in the face of opposition from Kirklees Metropolitan Authority.

A letter from the DES to the authority says that Mr Mulley, Secretary of State for Education, has overruled a plan to end teacher training at the polytechnic by 1978 which has substituted a scheme to keep 300 of the existing 410 teacher places.

The original proposals by the DES were severely criticized by the local authority and the polytechnic. Mr Ernest Butcher, director of educational services at Kirklees, wrote to the DES correcting figures issued by the department about the college and challenging the DES case for closure.

The department's letter, signed by Mr Hugh Harding, a DES official, concedes that "after studying the observations made and the further information supplied by the director of education, the Secretary of State has concluded that he would not be justified in pursuing the proposal further."

The polytechnic has recently received approval for the Council for National Academic Awards for a new degree in science and education to train science teachers who, in spite of unemployment among qualified teachers, are still in short supply.

Mr Howard Lyon, the accommodation officer, who is also chairman of the National Association of Accommodation and Welfare Officers, said that the association was interested in raising the idea of a national level of design course.

An advertising campaign in local press will take place in August and September and the beginning of the autumn term. The advertisements, which were designed by the students,

Mr Grinstead had a special word for the civil service. He warned of the greater danger of the university being sucked into it. If academics' salaries were assimilated to the civil service they might find themselves under its control.

Further, I suspect there is going to be a revolt against the quite unjustifiable situation which the Civil Service has achieved. It is really absurd that they have

retained complete security, freedom from criticism, non-contributory pension indexed to inflation and rates of pay above university teachers in other European civil services."

Universities ought to take more control of their own salaries and perks and allow a degree of variation to get in. Everything, Mr Grinstead said, was becoming too centralized and uniform. Inflation was forcing university teachers to become trade unionists which up to a point was justifiable, but beyond that could be disastrous.

"We can see the chain of events all too well. The central authorities, ministers and civil servants will say that university education is something of a luxury. They will have you believe, though I suspect against a great deal of evidence, that polytechnics are cheaper. However, they will graciously dispense some more funds to the universities, but only at the price of getting their hands more directly upon them."

Mr Grinstead concluded that the universities had to do much more to mobilize the influential body of opinion outside their walls which was more and more concerned with their future.

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Poor results bring BED review

Madeley College authorities are to carry out an urgent review of the assessment of Bachelor of Education degree students at the College. The decision was taken at a recent meeting of the academic board.

According to the resolution accepted by the meeting, the board "is disturbed by the low proportion of good honours degrees awarded in 1975 to students taking the B.Ed degree", and "is determined that as a matter of urgency" it will review the standards set and procedures used to arrive at the final award of B.Ed.

Included in the review, to be carried out by the Committee of Nominated Teachers during the fourth year of the B.Ed course, are comparisons with other university degrees.

Mr Peter Fowler, secretary of the Madeley College branch of the Association of Teachers in Colleges and Departments of Education, said the association had been concerned for many years with the effect of geography on the chances of students at many institutions getting good honours B.Ed degrees.

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Still no sign of detailed reply to year-old report on postgraduates

by Alan Wood

The Government was unable last week to give its detailed response to the recommendations of the Expenditure Committee on postgraduate education and maintenance allowances for 16 to 18-year-olds. During the Commons debate on the committee's report, Miss Joan Lester, under-secretary for education and science, confessed to being unable to give any idea when a reply would be published, even though the report was published in January, 1974.

Miss Lester said she accepted the need to ensure that students and their families received the support they needed to take full advantage of educational opportunities. That was important.

A new approach could only be studied primarily in the wider context of family support and the social services, perhaps in the relationship between educational benefits and the new child benefit arrangements. The Government intended to do that. It would reply to the committee's report in a White Paper as soon as it could.

The Expenditure Committee recommendations on postgraduate education covered not just the DES but all sorts of bodies working in postgraduate education. Many of these bodies had commented on the report and their comments would be taken into account when the Government was in a position to make its views known.

The Expenditure Committee report, she said, made three main criticisms of the present system: it found that the rate and pattern of growth in postgraduate education had been sufficiently controlled; it proposed that it should be shaped not by student demand alone but principally by the needs of the economy and society, with much more emphasis being given to postgraduate education; it proposed that the system of student support should be radically changed to encourage the reshaping of postgraduate education.

There was a great deal in the report's account of the purpose of

postgraduate education with which the Government would not disagree. It was the Government's policy, as it had been under successive Governments, that wherever in undergraduate education places were provided for those who were willing and qualified to take them up, at the postgraduate level provisions were more limited.

The amount of finance available to support students was limited by the department in the quinquennial settlement, by the UGC in their allocations to universities and by the judgments which universities made of their priorities.

Although all this might result in a slower response to external change than the report thought desirable, she did not think overall that it could be regarded as an uncontrolled system.

In the responsiveness to the needs of society and the economy there was a fundamental problem whose importance, she felt, the committee had underestimated. The Government accepted that the social need was one of the main factors to be taken into account in the dual system for university postgraduate education which the committee wished to be retained—support by the UGC and the research councils.

On the suggested radical restructuring of the system of student support, Miss Lester said she found the report a little difficult to follow because it was clear that even if some tightening up of the system of control were desirable, there were a good many ways of achieving it. The Government would want to be certain that the method chosen would not involve unacceptable disadvantages.

The committee had sketched out a possible radical approach calling for more rigorous central control but they would have to think carefully before contemplating a move to a system which put more control over course provision in the hands of central bodies. They would have to consider whether the change would be compatible with the existing system of control over the rest of higher education or whether it would have repercussions on the UGC's relations with the universities.

As for postgraduate provision in the polytechnics, it was not in the nature of the polytechnics to operate at postgraduate level on a scale fully comparable with the universities.

On educational maintenance allowances in the 16 to 18 age group, Miss Lester said the Government had a great deal of sympathy and support for many of the views expressed. It was essential to wait until the final form of the Child Benefit Bill, now before the House, could be seen.

The committee's main conclusion, that the present arrangements should be replaced by a nationally prescribed all-embracing system of allowances at mandatory levels of payment, was one that required very careful examination.

Dr Keith Hampson (Ripon), secretary of the Conservative Parliamentary Education Committee, criticized Miss Lester's remarks on the report as being "stodgy and unimaginative". He said that a great deal more should be known about the costing techniques of the DES and additional postgraduate places.

He felt that the subject of relationships with industry should be pursued and the appointment of more liaison officers considered in order to promote a contractual relationship between industry and higher education.

If we are to be caught in an economic squeeze, it is important that some of the high-powered departments which have well-qualified staff undertake this work, so that they are not kept short of money. I believe that people in our best universities should be able to rely on the fact that in the next year or so they should be able to undertake contract work.



Aston University's new library, which cost more than £800,000 and is now open for 300,000 books, has been officially opened by Sir Joseph Wainman, the university's first pro-chancellor from 1966-70. It has been in use since April and will eventually provide seating for 980 readers.

'Dynamic' college praised

by David Hencke

Cambridgehire College of Arts and Technology, has been congratulated by the Council for National Academic Awards for its dynamism and enthusiasm in spite of unsatisfactory accommodation and facilities.

The CNA's quinquennial report said: "The college has become a dynamic and forward-looking institution in which an academic community of unique character has been established by the general calibre and enthusiasm of many of the staff, their commitment to the students and the very high morale which existed, despite very unsatisfactory working conditions in many areas."

The CNAA visiting party adds it was impressed by the very harmonious relationship between the academic board and the governing body. They also noted that the academic board had decided to adopt a rolling quinquennial system of academic planning.

The report is, however, critical of the lack of accommodation, facilities and staffing in some areas. "The visiting party considered that although the library staffing establishment was satisfactory, the library accommodation was alarmingly inadequate. Not only was the total space available much too small for the number of students, but it was split between four sites and the heating and lighting in the reading room was unsatisfactory."

The report notes that there are not enough staff workrooms and tutorial rooms. Student facilities were also described as inadequate.

Lord Hinton joins energy Jeremiahs

The extent of the energy crisis facing Britain was emphasized by Lord Hinton of Banks, chancellor of Bath University, at its recent graduation ceremony.

The state of natural resources and of the economy have been a recurring theme in graduation addresses in recent weeks. Joining Lord Hinton in stroking warnings about the need for conservation was Professor J. L. King, of the department of mechanical engineering at Edinburgh University, who delivered the promotion address to graduates.

Professor King said people had forgotten that their roots lay in small self-sufficient communities living on what they themselves could produce.

Lord Hinton introduced a political note in his speech saying his own generation was bequeathing a Britain no longer great, having exhausted most of its natural and financial resources and now forced to live on its skills.

Don's diary

Exam time

What is it really like to be alive as an English don at Cambridge? ... For me, part of the answer (only part) is like this ... the diary begins, I should add, after the teaching year is over, and examinations are just about to begin.

Wednesday: write a second time to — state university to ask if they have received my article on Victorian prose. They asked me to write it, but I suppose they may have decided they don't like it.

Thursday: committee meeting, me in the chair ... chief business really to get a decision taken about policy, before the administrators whose interest is in wordings and regulations to take the bit between their teeth. In the storeroom next door, my tape-recorder is taping a Telemann concert at the same hour.

Friday: find myself dining alone, at the high table in college, with a man who was a don at New College before the war, when I was an undergraduate there. Best talk for a long time, mainly about water engineering which is his thing. Elderly dons (he's retired) learnt somehow to fuse their subject and their recreations much more intelligently than most of us can.

Monday: more marking of long essays for the degree exam in English this year. What (it makes me ask) is the study of literature about? My answer is that, first, it is about major texts which illuminate the matter of art and the powers of language; about good and evil in life and so about every dimension of the individual and also society; and about man in his environment. There are a lot of other things, like spelling and how to knock up a proper bibliography, but they don't count first.

Afternoon, committee to discuss economies over assistant staff (no redundancy allowances, etc.). Everyone very sane and cooperative.

Sunday: capsize the inflatable dinghy while playing with the children, and fall in the river. Fortunately they were both on the bank. Just at that very moment, my headmaster, a great oarsman, sculls past in lordly fashion.

Thursday: meeting for four hours in the afternoon. The struggle to introduce a final year special option in English literature since 1945. Last week hands down. Now, in Cambridge, we have this contemporary literature option, a paper on modern critical thought, and a chance for candidates to write long essays on contemporary subjects. It is some little distance to have travelled.

Tuesday: more long essays ... also, writing a memorandum to the university on a regulation, and whether or not a certain student should be given a dispensation under it in view of all the circumstances. Recalled reading, some while ago, counsel's opinion supplied to the university on a tedious point of legislation that affected our interests. Wonder what he got paid? My place was rather more intricate, and (if I may say so) about as well done on the whole. Why have we got to the point where I have to do it?

11.15 pm: finished writing a poem I started some longish time

ago, abandoned another. It's bad luck when you have a decent idea for a poem, but exactly the kind you don't want to go ahead with for the time being. The idea was for a fast moving, animated one, but what I want to do next would be something slow, spare, that kind of thing. But no time to be slow or spare until that pile of long essays has eroded.

Friday: More long essays as usual, then spent some time reading Culler's *Structuralist Poetics* as a step towards rewriting next term's lectures. Every time I tackle this rewriting (which means every year) I develop the feeling that I know nothing about the subject at all, that last year I missed all the fundamental points and wasted everybody's time. Fortunately — for me at least — these gloomy feelings dwindle as the rewriting process goes on.

Wednesday: am asked to organize no fewer than three "circus" courses (that's a course with a fresh lecturer each week) for next year. Draft three memoranda to go out to some of my colleagues, then realize it had better be one.

Wednesday: letter from Financial Board Office. Clearly, if I do not want to pay Class 2 NIS contributions I shall have to pay two separate grounds in fact to the department of CF 359 "as a matter of urgency". I think of the hundreds of thousands of people doing the same thing, and the thousands checking the forms over at the other end ... some comic insanity somewhere.

Also, a letter from the university saying that my article must have been lost in the post. Fortunately, I have a duplicate copy. Mid-morning: bit of a crisis. Have to arrange for our office staff to work late on Sunday evening (and on Monday evening) because of a sick in the Senate House by the name of Arthur Group. Unless you want to be exclusive and elitist it's a municipal problem not a university one so far as I can see. There's also something else I a little dislike, which is a sense that every difficulty in life is really an abuse that the authorities ought to take care of.

On the other hand, I recollect my own mid-twenties and see there could be another perspective. In those far off days, they just used to tell a young man that he ought not to be married at all. Getting married and a commitment, when I said I didn't want three months after getting married, to sleep in college four nights a week.

Friday: memo from the General Board Office to say that they have had to cancel a committee meeting because so many members have had to cry off for one compelling reason or another.

over coffee in the erstwhile Senior Common Room of the London School of Economics but they did not back their hunches in print.

In a way the case for the universal free issue of paintboxes arose as an act of both practical and symbolic propriety. There was firstly a paramount need for the children in the nurseries to have something to do, and secondly there was a perception of the revolutionary role and significance of paint.

Paint had been used to some extent in the earlier revolutionary phases but students had not at that time grasped the élitist implications of being expected to supply their own materials. Students with superior financial resources had bought their own paint, so leaving the more indigent without the physical means to make their revolutionary feelings known.

The growing immiseration — and passivity — of the student class did however point to the need not merely for a new revolutionary initiative but for serious attempts to create the conditions under which everybody could express their creativity. Hence the demand for universal free paint.

One further factor was a deepening realization of the political significance of colour. It was precisely this aspect that gave rise to some of the nastiest incidents in the whole campaign. The university authorities acted in a quite need-one or two people did indeed speculate on what might logically follow on a demand for the universal provision of nurseries and progressive toys but nobody foresaw that there would be a violent upsurge of feeling about the issue of paintboxes.

Initially two Balliol men have much claimed they saw it all

Greed gospel

Friday lunchtime: AUT open meeting. I do not believe that withholding examination results would harm our students' interests as much as some allege; but the whole idea, I must say, struck me as a little less simply not up to the present threats to the academic profession. Some group has got to turn its back on the gospel of "More for Me Too, or I'll Break Something" and let it be my group.

Monday: more long essays arrive to be marked. Every day, weekends, included, I must keep up the stint, exceed it if possible. Such industry and care in so many of them; but more and more, I want to find a way to say effectively: "first of all choose a subject that you think genuinely worth while to put — not simply something that we shall have to give a good mark to". Trying to fit in the Arnold review (at odd moments) keeps this in my mind. In an effort to be fair, I try also to give high marks to some of myself think meticulously erudite pointlessness. Wonder if that really is fair.

Tuesday: agenda for the college staff-student committee arrives (from the student secretary) at 2.30 pm, meeting at 8.15.

Wednesday: letter from Financial Board Office. Clearly, if I do not want to pay Class 2 NIS contributions I shall have to pay two separate grounds in fact to the department of CF 359 "as a matter of urgency". I think of the hundreds of thousands of people doing the same thing, and the thousands checking the forms over at the other end ... some comic insanity somewhere.

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Friday: final marks meeting, 9.45 am to 7.23 pm with a half hour for lunch. The other side of the coin I had to go over something alone) and 10 minutes for tea. In the evening we celebrate with a Dutch treat dinner in my college. Have to leave, rather abruptly, at 11.25 pm. Someone is telling me about consonant changes in something, but

my own achievement representing their personal solidarity. Again there was a quite effective experiment in psychological warfare carried out by a group of militant painters who sedulously painted all through lectures. Many lecturers were seriously disoriented by the sight of massed painters entering the lecture hall accompanied by their boxes of brushes and little egg cups of water instead of ink. However, the craze for passing a collective picture from painter to painter eventually passed off and no serious critical breakthrough was made against the whole concept of lecturing.

Eventually, of course, the porters began to find paintboxes abandoned in the loos and soon great piles of used paintboxes built up into a melancholy and eloquent witness to what had been a very genuine expression of political militancy and moral protest. It was recognized, however, that the elitist element had never been really eradicated, since many students had painted pictures which were regarded as superior to the pictures painted by the porters. This element of differential performance and differential pleasure entered in the whole thrust of the paintbox movement was enunciated.

Indeed it was agreed on all sides that the elitist notion of an issue of paintboxes specifically to students was itself unconceived, and that nothing less than a complete issue of paintboxes to every member of the working classes could have the required effect, so long that is as they did not waste them by painting the Fourth Bridge.

NB, considerations of space and safety prevent any analysis of what happened when polytechnic students were issued with felt tips.



The academic round: from Matthew Arnold to home brew.

Mark time

Monday: the first examiners' marks meeting for the English BA. Fifteen of us, me in the chair. Hours 9.45-1.0, 2.15-7.0, 8.30-11.58—a long day, possibly too long to make sense. Each year we incorporate more information into our marks books, and of course, each year it takes us longer to make use of it.

Before the final meeting on Friday of this week, I must once again (it has to be done afresh every year) master the regulation about candidates whose colleges write in to say that they have had to prepare for the exam under some exceptional difficulty (illness, car accident, etc.). No one seems to have noticed that, as the regulation is worded, there is one set of circumstances in which it could be very advantageous to a candidate not to have such a letter. Perhaps I'd better do another counsellor's opinion to say why that is so.

Thursday: final rereading of scripts. Nice to find that the only one where I have to admit I made a plain error was a case where a young and new examiner got the mark about dead right. Friday: final marks meeting, 9.45 am to 7.23 pm with a half hour for lunch. The other side of the coin I had to go over something alone) and 10 minutes for tea. In the evening we celebrate with a Dutch treat dinner in my college. Have to leave, rather abruptly, at 11.25 pm. Someone is telling me about consonant changes in something, but

my eyes are closing. Getting old.

Saturday: these high winds are damaging the young birches that I planted eighteen months ago, so I had some much stouter tree stakes delivered from the local wood yard, and today spent the afternoon and bit of the morning on the top of a very sticky pair of steps, knocking them in with the butt end of the felling axe that I bought for 2s 6d many years ago at an auction sale in Aberdeen. I'd dropped in by chance, and can still remember that it felt like to walk down Urquhart Street in my best dark suit, with that great axe over my shoulder and the dunces bunched of the place eyeing me as if I'd got out of the bin.

Monday: Clearing up after the examining period. First thing to do is clear a space on my desk to work at. At 11.15.

Tuesday: a colleague rings me up from our porter's lodge at two minutes to one; so I ask him to lunch, impromptu. We talk about examining. In the evening, call on a bachelor schoolmaster at the children's school, we get to talk about home brewed beer (it's what we're drinking), and suddenly he takes me into his kitchen and, just to show me how it's done, brews two gallons, straight off, from start to finish.

John Holloway

The author is Professor of Modern English at Cambridge University.

Oil jobs yet to make impact

An increasing number of Aberdeen University graduates were being employed in Scotland, according to new figures from its careers service.

The proportion of graduates going into industry has risen, but few jobs seem to have been created in oil. Recent figures from Strirling University confirm the general United Kingdom trend away from teaching, which is also apparent at Aberdeen.

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Mr Mulley gives breakdown of graduate employment

A breakdown of the number of graduates entering industry, commerce, education and the public service (including HM Services) in recent years was given in a Commons reply by Mr Fred Mulley, Secretary of State for Education and Science.

He explained that the figures related to home and overseas students with first degree degrees from universities in the United Kingdom and who were known to have gained permanent employment in the United Kingdom between graduation and December 31 of the same year.

Year	Industry	Commerce	Education	Public Service (including HM Services)	All others	Total	Total graduates
1968-69	9,129	2,524	1,775	2,703	1,578	17,709	46,043
1969-70	9,804	2,615	1,781	3,221	1,538	17,959	48,683
1970-71	8,747	2,815	2,016	3,559	1,414	17,550	50,551
1971-72	6,637	3,093	1,633	4,194	1,640	17,117	51,930
1972-73	6,051	3,918	1,474	4,187	1,890	19,560	52,848
1973-74	5,549	3,865	1,827	5,107	1,978	21,026	53,553

* Provisional figures.

Grandes Ecoles exchanges arranged

Five university engineering and electronics departments are taking part in student exchange schemes with French institutions this year as a result of successful exchanges last year between British universities and a group of Grandes Ecoles in Paris.

The departments involved are electronics at Southampton University, electrical engineering, science at University of Warwick, mechanical engineering at University of London, civil engineering at New

castle University and mechanical engineering at Imperial College, London.

The exchanges will be for a three to six month period during the final year of a "Grand Ecole" student's course, or for one year equivalent course.

The additional expense of studying in England for French students is to be subsidized by the British Council and for British students in France by the Grandes Ecoles.

News in brief

£2.5m extra for London students

The Inner London Education Authority is to pay an additional £2,458,000 in student grants during the next academic year because of the Government's new level of grants.

BSc in languages

A three year course leading to a BSc in organizational analysis at industrial relations is being introduced at the University of Salford next year.

Organized by the Department of Business and Administration, it aims to examine how organizations work and will take industrial relations into account.

Inside industry course

The University of Salford is to introduce a three-year course leading to a BSc in foreign languages and English. The course pays particular attention to language work and students will spend six months abroad.

It is designed to produce graduates fluent in chosen foreign languages and familiar with English studies.

Schools' failure criticized Modern teaching in schools often failed to produce students with even basic knowledge and skills, according to Mr T. M. Howie, principal of Paisley College of Technology.

Giving the college's annual graduation ceremony address, he said the new trends away from the formal education of the past were losing children with greater vision and confidence, but were unable to express themselves logically and coherently.

Welsh schools research

The College of Librarianship, Wales and Clwyd County Council are to cooperate on a two-year research project into resource based learning in comprehensive schools.

Centre in the van

A Centre for Medical Education claimed to be the first of its kind in the United Kingdom, and was established at the University of Dundee.

As a service unit, the centre will provide information for the members of medical teaching departments throughout the country.

Nursery research grant

Psychologists at Keele University have been awarded more than £120,000 for a study of children below school age and nursery education. The bulk of the grant will come from the Department of Education and Science, and about £12,000 from the Social Science Research Council.

New accounting degree

Middlesex Polytechnic is to offer a new Council for National Academic Awards honours degree in accounting and finance. The new four-year sandwich degree includes a year accounting focused option and choice of specialization in the fourth year, ranging from financial relations to the analysis and design of information systems.

The issue of paintboxes: an analysis in retrospect



DAVID MARTIN

From a copy of The THES, May, 1977.

One of the oddest features of the paintboxes issue is the fact that not a single social scientist had any intuition that in 1976 it would be the basis of a major confrontation in British Universities. The issue was a quite need-one or two people did indeed speculate on what might logically follow on a demand for the universal provision of nurseries and progressive toys but nobody foresaw that there would be a violent upsurge of feeling about the issue of paintboxes.

Initially two Balliol men have much claimed they saw it all

over coffee in the erstwhile Senior Common Room of the London School of Economics but they did not back their hunches in print.

In a way the case for the universal free issue of paintboxes arose as an act of both practical and symbolic propriety. There was firstly a paramount need for the children in the nurseries to have something to do, and secondly there was a perception of the revolutionary role and significance of paint.

Paint had been used to some extent in the earlier revolutionary phases but students had not at that time grasped the élitist implications of being expected to supply their own materials. Students with superior financial resources had bought their own paint, so leaving the more indigent without the physical means to make their revolutionary feelings known.

The growing immiseration — and passivity — of the student class did however point to the need not merely for a new revolutionary initiative but for serious attempts to create the conditions under which everybody could express their creativity. Hence the demand for universal free paint.

One further factor was a deepening realization of the political significance of colour. It was precisely this aspect that gave rise to some of the nastiest incidents in the whole campaign. The university authorities acted in a quite need-one or two people did indeed speculate on what might logically follow on a demand for the universal provision of nurseries and progressive toys but nobody foresaw that there would be a violent upsurge of feeling about the issue of paintboxes.

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over coffee in the erstwhile Senior Common Room of the London School of Economics but they did not back their hunches in print.

Temples of the muses also need money

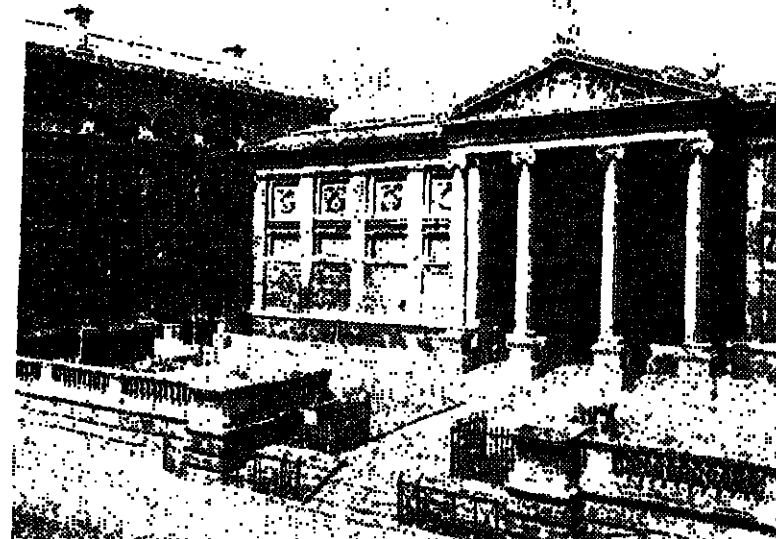
The Oxford Dictionary describes museums as "buildings for the storage and exhibition of objects", and explains that the word originates in the Greek *museion*, temple of the Muses. By that definition the museum I look after is the quintessence of museums; it looks like a temple, and is a place where infinitely large numbers of objects are stored.

When you have spent much of your life officiating in one temple or another, devoted to this mysterious cult, it has to be admitted that the idea of a museum does not command much public sympathy.

At all events, most local authority museums are now grouped as recreational, not educational facilities. I hope you think, as I do, that that is wrong. For the whole museum structure in this country—the British Museum, the National Gallery and the university museums are unique exceptions—was the conscious product of an industrial society, and was based upon the theory that museums were places in which works of art were put to social use.

One wishes that we could recapture something of the optimism with which they were spawned in the nineteenth century. They were not founded privately like so many museums in the United States; they resulted from civic enterprise, and they are still dependent largely on civic support. I think I should not be pitching it too high, if I said that people who care about museums in this country outside London regard the situation that confronts them with something like despair.

As little as five years ago the staffs of regional museums could look forward, not exactly to an affluent future, but to a future which might be more productive and less fettered than their recent past. There was a genuine (if not professed) concern, on the part of the minister responsible, that standards in regional museums should be not merely maintained but raised, and a determination to end the period when metropolitan museums had a monopoly of privilege. And as a proof of this concern was made available, through the museum that I then directed, for supporting regional museums purchases. The sum



The Ashmolean Museum, Oxford: what museums throughout the country need is practical encouragement.

involved was small, but it was used by and large—extremely well, and as a result in this one area of purchasing, regional museums could once more breathe.

It seemed logical that that very uncontroversial system should be extended, and that an annual sum—not a large one, less than half a million pounds—should be made available for the reconditioning of old-fashioned exhibition galleries on the same basis as the purchase grant, a 50 per cent grant with a matching local contribution. Had that been done, how greatly the usefulness of regional museums might have been increased.

It seemed even that a longer term commitment might be made to the one step that would finally break down the barrier between museums in and outside London: the regrading as national museums of a few large museums outside the metropolis. Instead, yet another committee was set up to investigate the matter of regional museums, and in due course it issued a report. It did not crystallize the problems; it left them just a little less well defined than they had been before. And it was succeeded by years of inertia, in which practically nothing was achieved.

I don't want to suggest that financial difficulties are confined to museums in this country. As the Ambassador will know, many States are short of funds, and have difficulty in paying guards and in maintaining their collections. Their embassies are real enough, but they are, for a variety of reasons, less serious than the predicament of the national museums. For one thing American

museums enjoy greater community support and pay bigger social dividends. And very many of them would, by tradition, be resistant to the principle of federal support. But no such inhibitions exist here. It would, indeed, be quite unreasonable to expect larger private contributions, larger corporate contributions, larger civic contributions, in face of governmental apathy.

What local museums need throughout this country is practical encouragement, a continuing long-term programme that will provide some promise of a better future and some recognition of what they can contribute to the world in which we live. And it is here that the activities of National Heritage are of real consequence. It is a lobby, and lobbies can achieve extraordinary things.

If the problem of our museums is just a little less covered over than it was three years ago, it is their advocacy that is responsible. They have embarked upon the task of enlisting support from industry for small, underfunded museums. And through the prize that is to be awarded here, they have provided an incentive for the staffs of small museums to raise their standards and modernize their services.

So it seems to me that National Heritage deserves the support of all of us, and that the mandatory reason for endorsing it is not compassion or sentiment, but the belief that in this field official policy has for some years been badly out of gear.

Sir John, Director of the British Museum, delivered this speech at a lunch given by the Illustrated London News at which the annual museum awards were presented.

Workers' education is alive and well and flourishing in Aberdeen

The Workers Education Association in Scotland has been criticized as an inappropriate transplant from the south. Yet in the north of Scotland, one of the three Scottish districts, there is talk of a WEA revival. Just how true is that?

The district was founded in 1947. It has one constituent branch at Aberdeen, and another 12 miles south at Stonehaven. It is run by a committee of 14, whose members are drawn from a council of 120. For many years its work consisted almost entirely of evening classes and lectures.

Last year George Brown, secretary for 18 years, retired and was succeeded by Peter Stubblings, a 28-year-old Englishman who worked in adult education in Cambridgeshire before moving up to Aberdeen originally as the tutor organizer. The present tutor organizer is 22-year-old Joan Aitken, and there is an administrator and a clerical assistant.

The chairman is a university lecturer, the vice-chairman a retired schoolteacher, and the treasurer a Labour councillor. Last year there were 2,594 enrolments, and this year the estimated operating budget is £20,000, most of which will come from the Scottish education office and local authorities. The district headquarters are in an Aberdeen shopping centre.

Just over half the district's activities are typical of a WEA branch, like conventional lecture courses given mainly by university lecturers in 50 centres ranging from Aberdeen down to Caterline (population 120). They range from environmental studies to welfare rights, and there is a growing interest in Scottish subjects, such as language and history. About 80 per cent of these courses take place within a radius of 40 miles from Aberdeen.

The second traditional component is industrial work. This includes evening courses on subjects ranging from health and safety at work to the social contract, given either on a weekend or day release basis, and are run in the factories or in local hotels.

However, Peter Stubblings emphasizes that most of their work over the past year has been innovative. He cites courses on welfare rights for local authority social workers, and one-off sessions on the rights of various groups such as pensioners and disabled people.

In Perth there is a housing rights course, and a local lecture takes a discussion session in the local mental hospital once a week. In Aberdeen, there is a discussion group of disabled and able-bodied people, and a staff-member of a lodging house is giving residents a course in local history. Joan Aitken spends three periods a week on informal tuition in an old people's home.

The district is also planning its own literacy scheme, and present has two cells of about a dozen volunteers each. These work with the referred people on a one-to-one basis. Peter Stubblings says he sees the main problems as securing long-term support, convincing local authorities that they should support adult education, and raising finance. Plans for one tutor organizer at Inverness and another at Dundee, or for one industrial tutor, and two liberal education specialists have been turned down. But he still has the Liberal Resource Agency for one and a half action researchers, a community worker, and a "deputy" worker.

"The district council formally decided a year ago that we should do a more relevant programme. After all, what's the point of lecturing on birds of the Argyle estate to mothers who spend their Saturdays bringing up children in a tenement? It's all like a foreign language to them."

Yet there are doubts and problems. Joan Aitken, for example, wonders whether the WEA is not just an organization for the sake of being an organization, and is discouraged by the lack of voluntary support.

"Some interesting things are happening", she says. "But there is an element of pre-gangling, and if that happens it can only go on for so long."

Peter Stubblings remains optimistic: "We are just going through the phase of innovation at the moment. We are trying a whole lot of new things that we know we can do. In England the WEA may have a crisis of identity, but in Scotland we have never been stronger."

Tim Albert



Wye College's new centre gives all nationalities a chance to share common problems.

Pommes de terre, funds and conferences at forum farm

Farm affairs go international this year with the opening of London University's impressive Centre for European Agricultural Studies at Wye College, near Ashford, Kent.

Designed as forum for the discussion of common agricultural concerns, its aim is to represent all interests related to agriculture, horticulture, forestry and the food industries throughout the EEC.

Although it does not officially open until early autumn, the centre's work has already begun. Critics of the Common Agricultural Policy and proposals for its revision are being reviewed; a study of meat marketing in Europe has been set up by the Meat and Livestock Commission; and a two-year research project into some of the EEC's repercussions on its trade and agricultural policy has been agreed in principle with a Commonwealth government.

The centre has a multiple purpose. To agriculture and industry it offers research programmes, as well as courses, study groups, seminars and conferences to bring together British and continental farmers, business executives, politicians, administrators, scientists and academics.

To Commonwealth countries the centre will interpret and transmit its specialised data. Developing countries will benefit from Wye College's longstanding concern with the Third World, and the centre's recognition of the special problems of countries whose agricultural economies are linked with Europe.

Other European universities will have valuable opportunities for exchange of personnel and information, as well as for collaboration in research and teaching projects. And in general the centre, as an integral part of London University, will offer all the advantages of a university establishment.

Already a number of research studies has been published, and the first titles are: *The Common Agricultural Policy: Synthesis of Opinion*, by Rosemary Fennell; *Soil Classification, Land Valuation and Taxation: the German Experience*, by Dr Carl Weiers and Ian G. Reid; *The World Commodity Scene and the Common Agricultural Policy*, by Simon Harris.

Several seminars have also been organized by the centre. In July, 1974, Exeter University was the setting for one on "The Future of the Family Farm in Europe". This was followed last February by a seminar at Padua University on "Rural Development", and another at Wye in March, on "Modern Farm Business Analysis and Planning Techniques".

As an institution officially recognized by the European Commission, the centre's library receives all the documents relating to food and agriculture in the EEC, and other countries can enjoy its economic information services.

The director, Mr Ian Reid, has proposed four main areas of work for the time being: agricultural, financial, farm restructuring (including aspects of regional planning), commodity

Frances Gibb assesses new developments in Dip HE courses

How to keep your options open and still find a quick way out

At least 33 colleges of education are seeking validation for Diploma of Higher Education courses from 16 different universities, according to the first newsletter of the Association of Colleges Implementing DipHE programmes (ACID).

But the DipHE is seen in most cases not so much as an end in itself, but rather as a way out for students who do not wish to complete their course or are not suited to teaching as a career, it adds.

Among the four polytechnics and the one college due to launch the second round of DipHE courses this autumn there is a slightly more positive attitude. All five see it as a means of enabling students to keep their options open.

At Crewe and Alsager College of Education, where the DipHE will be linked with a BEd course, Mr Geoffrey Doherty, assistant director of academic affairs, said: "Our course has been designed to lead to more than one outlet, so a student may embark on a DipHE and go through to a BEd, or just take the diploma itself, or go on to a degree other than a BEd."

There were two points of choice, he said: at the end of the first year a student could opt out of either the teaching situation or a degree combination, and at the end of the second he could opt for a combined BA degree in educational studies.

The first year intake in October will consist of 250 students with the two A levels. Possibly half of these will take the DipHE course as a complete course in its own right Mr Doherty said.

At Huddersfield Polytechnic, the DipHE will be linked with a BA honours humanities course and a BEd in combined studies. Mr John Clarke, DipHE course leader, said: "It provides the students through out a two-year course with the opportunity of choice between

degrees. They can delay their choice until the end of the second year."

Most of the 25 students who start this autumn will take as their main subjects history or geography. In the future they will also be able to take drama, politics, and various other subjects.

He said that the polytechnic had another DipHE course in the pipeline which was still waiting for validation. This was based on a degree course in science and education.

The DipHE course at Oxford Polytechnic offers some 500 modules. Mr David Mobbs, course chairman, said: "It is part of a modular course which enables students to come out with a BA, BEd or BSc or a DipHE. It is designed to allow recruitment to be made specifically for the diploma course."

A student would have to concentrate on one or two areas out of 24 subjects on the modular course. It was more difficult to get a DipHE in two years than it was to go on to a degree, he said. Not all degree programmes were calculated to have a two-year break point as they involved a series of courses.

The DipHE course at Portsmouth Polytechnic will have two links: one with the BSc (honours and ordinary) single and joint degree courses which include the physical, life, environmental and earth sciences; the other with the BEd degree at the City of Portsmouth College of Education which will soon be the faculty of educational studies within the polytechnic.

Mr J. G. Scane, head of the physics department, said: "One of the advantages of integrating the diploma with the degree scheme is that a student is committed initially only to a two-year course to obtain a recognized qualification, but if he then wishes and is capable of

proceeding further he has the opportunity to do so."

It also made a student's return to full-time study for a degree easier. "In fact, by this route the full-time degree course can be turned into a sandwich course", he said.

During the first year, students would choose three subjects from a wide variety of topics including anthropology, applied mathematics, the biology of organisms, computer science, geology, psychology and pure mathematics. In the second year they choose one subject from chemistry, geographical science, geology, mathematics, physics, physiology, plant science, statistics and zoology.

At Wolverhampton Polytechnic, where the DipHE course is modular, students will choose their main subjects from the humanities and social sciences, with complementary studies in art and design, engineering and science.

A spokesman for the polytechnic said that a transfer from the DipHE course to the BA humanities, BA social sciences and BEd courses was being negotiated. The polytechnic also intended providing an entirely new one-year course for DipHE students, which would lead to a BA degree and have the same student-centred philosophy as the DipHE.

The students intake is expected to be about 60 for the diploma course.

A DipHE course linked with a combined humanities degree course has also been validated at Ulster College, Polytechnic of Northern Ireland, but the starting date of the course has been deferred until September 1976, while details of organization are worked out.

The association was formed earlier this year to promote the DipHE among potential students and employers and is attempting to define it.

Why dignified visitors never call

In a period when conflicts about the government and administration of British universities have become endemic, there has been widespread discussion of mechanisms and procedures for settling disputes. But remarkably little has been written or said about one highly relevant institution: the university visitor.

Who, you may well ask, is the university visitor?

The answer may be found by consulting your university calendar. In the list of principal officers, he or she is—or should be—at the very top. The chances are high that your own university's visitor is a very eminent person indeed: none other than Her Majesty The Queen, her heirs and successors.

But, mindful that she, or he, has probably never paid your university a visit, you may now ask, What does the visitor do? If your university's charter is as illuminating as that of my own, your question will not be answered by consulting it.

All you respond brightly, recalling your Bagehot: the visitor belongs, then, to "the dignified" rather than to "the efficient" part of university constitutions? Well, yes; but also, no. "No" because the visitor is not merely a piece of decoration on the university cake.

To get "the pukka" you will have to visit the law library, look up the constitutional practices of the visitor, I. W. Bagehot's article in the *Law Quarterly Review*, 1970, and dip into those weighty tomes, *Tudor on Charities* and *Halsbury's Laws of England*.

In the latter you will find: "A visitatorial power attaches as a necessary incident to all eleemosynary corporations, and may be exercised, in respect of all corporations, in respect of all cor-

between the members of the corporation, to inspect and regulate their actions and behaviour, and generally to correct all abuses and irregularities in the administration of the charity. Clearly, the visitor is quite an officer, and if you think that what I have quoted does not spell out power, you do not know what "power" means.

But the power is not used? Quite so—or almost so. Moodle and Eustace, therefore, do not waste much ink in *Power and Authority in British Universities* on the first of these lawyers. One paragraph suffices to make their main points: "The powers of inspection seem never to have been exercised in recent times"; and "the existence of the visitor's powers of inspection, beside which the UGC's powers of inquiry pale, is ... another indication of the extent of the independence of the British universities is a matter of convention."

Since I have recently published a blow-by-blow account of my appeal, it is now possible for any interested reader to re-evaluate the CAFD report in the light of the authoritative judgment of the visitor, and to compare the two in terms of the judicial quality they display.

Moodle and Eustace suggest that one reason for the failure to use the appeal mechanism provided by the visitorship may be that today the arbitration might not be accepted as appropriate or unbiased. My own hard-won experience suggests that there may be something in this. But a more likely explanation lies in the widespread ignorance of the institution on the part of members of universities.

I have some grounds for believing that these in authority would prefer this ignorance to persist. Certainly, the Lord President of the Council, who is often the person designated to exercise the Queen's visitatorial power, does not appear anxious to encourage empirical research on the subject. For some of us that might be sufficient reason in itself for exposing to the light this particular university antique!

To this handful can now be added my own, equally unsuccessful, petition, 1973-74, appealing against the decision of Birmingham University's Academic Appoint-

ment of Dick Atkinson to a lectureship in sociology. Although it was in no way sponsored by that body, I utilised as part of my evidence the excellent report of the CAFD commission inquiry on "The Atkinson Affair".

The commission's main conclusion was that "the conditions necessary for fair process and academic freedom were seriously violated". In my petition I developed the argument, based on recent changes in administrative law, that the decision to veto Atkinson's appointment, albeit honestly taken, was unlawful because it was unfair.

In rejecting my appeal, the visitor stated that, in his view, "None of the voluminous material ... which he meticulously examined disclosed shreds of evidence of any unfairness on the part of the (appointment) committee". By implication, therefore, he also rejected the main conclusion of the CAFD commission.

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Geoffrey Ostergaard

The author is senior lecturer in politics.

Attractions of taking a break loom large



Alan Cane visits a West Country comprehensive school in the tenth part of our series on what sixthformers do after A level.

More than half the number of sixthformers are now following a large West Country comprehensive have now decided to take a year off after A levels. But the measure of the academic tradition in the school is that not one of those originally aiming for higher education has decided on anything else.

We have to look outside this group to find Lynn, a girl capable of succeeding in higher education, who has decided to go into nursing. Instead, she is studying A-level English, French and biology, and was at one time interested in teaching. A visit to a college of education—one of those, incidentally, now

threatened with closure—depressed and disappointed her.

"I was absolutely appalled" she said, "the students there seemed so uninterested in what they were doing and academic standards were low."

But what seems to have turned her totally against higher education was a very stiff entrance examination at Bristol University which she did not enjoy. The university subsequently turned her down although she was accepted by both Manchester and Cardiff. Now she has withdrawn from UEA, and is applying for nursing training—her sister is already a nurse.

Amanda, planning to take a novel degree combining BSc work with nursing studies has been offered a place at her first choice—Southampton University in conjunction with St Thomas's Hospital, on condition she gets Bs and two Cs. She says: "It's quite tough, but now I've got something to aim for," she is still keen to work in the general area of family planning and has contingency plans to become an STN should her ambitions for a degree course go astray.

Amanda is keen to go straight into higher education as is Fiona, planning to read European studies at Bath University.

Originally Fiona planned a career as a bilingual secretary, but she now says: "The idea of secretarial work doesn't appeal to me. I'd like to be people working under me rather than over me." She has been offered a place at Bath conditional on achieving Bs and a C. "It's fairly high, but it shows the standard is good," she has had offers from other universities and polytechnics, including Central London, which asked for two Cs and a D.

At least one of our sixth-formers has, in the past few weeks, become converted to the idea of taking a year off. "On a Tuesday night I suddenly decided I wanted to take a year off and go to the continent"—so he is planning to visit western Europe with a friend.

Roger has from the beginning declared his intention of making a break and his plans are fairly far advanced. He has been offered a place at Birmingham Polytechnic conditional on achieving a B, C and D and it has become fixed as his first choice. He can combine history with politics there, it's the best which is why I want to go there."

Colin has been offered a place at the London School of Economics to read geography, conditional on getting two Cs, but has been turned down by other universities, although Bedford College, London, offered a place conditional on a B and two Cs. He is keeping several polytechnics in reserve should the LSE place fall through.

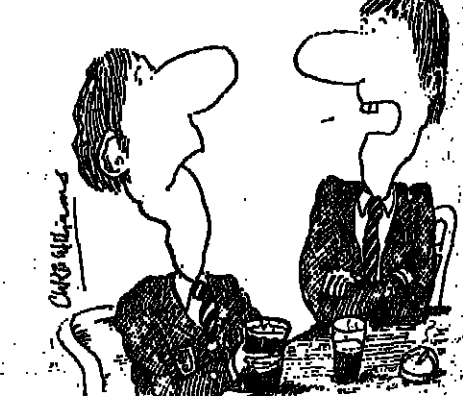
It is clear from almost all these sixth-formers that polytechnics impress them academically—it is the buildings that appeal them.

David is well disposed towards polytechnics but cannot decide between Middlesex Polytechnic and Sussex University to read social science. He likes the Sussex site with its greater array of resources. He intends to take a year off, partly to do some voluntary social work and partly to travel in the Mediterranean area. He has been offered a place conditional on a B and two Cs at Sussex and a place conditional on two Bs at Middlesex Polytechnic.

Oliver's future has brightened considerably since he passed O-level English in the early part of the year, and he now has a place conditional on his getting Bs in mathematics, chemistry and physics at Plymouth Polytechnic, where he plans to read mechanical engineering.

His attitude to higher education has changed. Before, he suspected that it did not have a lot to offer him. Now he is positively looking forward to Plymouth, which he describes as a good polytechnic with reasonable facilities, especially in mechanical engineering.

I'M GOING TO TAKE A YEAR OFF TO GROW A BEARD...



Joy is determined to go into a planning job with a local authority—these jobs are advertised about now so she will be looking for a job. She is taking A-level, geography and economics, which she will not need with the local authority, but she says: "I want to do as well as I can in case I want to go into teaching later but I definitely want to have a year's break from studying—instead of travelling I will be getting into a job."

Elizabeth seems to have lost her battle to take a bilingual secretarial course at Bristol Polytechnic. Her county authority insists that she goes to the local college.

Elizabeth, whose teachers agree is university material is understandably bitter. "I was when she has deliberately chosen a vocational course she should be proud of it. But taking the course she feels she will not find the money for her to go beyond its boundaries."

She points out that if she had wanted to take a university course anywhere in Britain it would have paid up without query.

A. F. Trotman-Dickenson discusses the adaptation of higher education to the growth of knowledge

Doctors, masters and the modern clerisy

The three stages of university education should be clearly defined with, for most subjects, an ordered sequence from bachelor's degree through master's degree to doctorate, and the degrees should at each stage qualify the holder for a distinctive role in society.

At least a generation has passed since a student coming from school could in three years be educated, in most subjects, to the point where he had a grasp of his discipline sufficient for him to practise it competently and to advance the state of the art. The student who now hopes to be a professional must receive further training.

Those students who do not intend to follow at the highest level the professional callings most closely associated with their undergraduate studies can be very well educated in three years. Indeed it would be a waste of resources, including the student's time, to keep them in statu pupillari for a longer period.

Reform may be based on the recognition of the nature and purpose of the normal three-year bachelor's degree. The universities should accept that in three years it is possible to advance greatly the knowledge and understanding of a student but it is not possible, in almost any field, to produce a fully-fledged practitioner. The three-year course can lay the foundation of general understanding which the practitioner needs and which enable him, in due course, to relate his special knowledge to its social and professional context but, simply because the time is too short, it cannot provide detailed and comparative knowledge of a wide range of applications.

Recognition of this position indicates that all three-year courses should provide a sound foundation of knowledge acquired by critical study and pursued in the manner calculated to obtain the greatest educational advantage. The product of these courses would not be men and women who are experts but they would be useful members of the modern clerisy, in the term coined by Coleridge to describe the general body of educated persons who should lead society. Acceptance of this view of the bachelor's degree would remove some of the difficulties that have emerged during the prolonged debates on the sixth form curriculum.

Notably, the myth would be dispelled that there is an absolute standard of knowledge that should be attained in an honours degree. It is possible that before the recent growth of knowledge a graduate could claim to stand on the edge of the unknown. This time has passed. Nothing is therefore achieved by distorting work in schools in order that some pet topic be retained in the undergraduate syllabus.

The changing requirements of the larger student body and the growth of knowledge have led to the variations in the three-year degree. The teaching of the traditional single honours subjects which still

commands the allegiance of the great majority of students has become more abstract and refined. Such distillation of truth can be seen in the natural evolution of any intellectual discipline. The distillation may lead the student more rapidly to the ultimate understanding, but it should be remembered that many people's perception, especially that of the young, is clearer after tincture of a pint of claret than a glass of brandy. Much teaching in the sciences, at least, now omits accounts of the historical development of the laws that are taught. The omission is an intellectual loss.

On the more technical level the rush to include fashionable research results is liable to lead to neglect of the construction of the proper intellectual foundation which may be in mathematics, languages, or other basic tools. Numerous universities have sought to solve some of these problems by the introduction of more general courses that embrace a cluster of traditional (and some less traditional) disciplines. Scholars often incline to dismiss these courses as superficial. The judgment may be hasty as no critical study appears to have been made. Nevertheless, to give a degree can be taken in European studies without a sound working knowledge of, say, French or German has not always been convincing. Clearly there are difficulties in the way of the student who wishes to use the general course as a key to scholarly knowledge.

Release of the pressure to attain an illusory goal in the three-year degree should free universities to teach with the primary aim of a humane education built on a secure foundation of knowledge.

The graduate should have that understanding of learning which is the mark of the clerisy. Graduates from courses devised in this way will not emerge as competent practitioners, but then the same can be said of our present graduates. The specialist who is to be a practitioner of his subject should be the product of a master's course. The name of the degree with its relation to master craftsman and the masterpiece signifies its purpose. (No pleasing etymological parallel exists for bachelor whose terminology probably derives from cow-milking.) The proportion of bachelors who will need to proceed to a master's degree will vary from subject to subject and should relate to national manpower requirements.

The initial intakes to the lengthy and expensive courses for medical, dental and veterinary students are based on this principle. Graduates who teach in schools are required to receive a year's training in numbers that depend on the needs of the schools. The intake of students to architecture and town planning is as yet less subject to control, but the same principle should govern the degree here to take a second period of training before entering on their professional careers.

These disciplines involve only about 20 per cent of those who obtain bachelor's degrees. Most of the remainder enter fields of work in which professional bodies have little influence or in which the bodies have little concern with the conduct of their members. Some bodies, such as accountants and lawyers, require holders of bachelor's degrees to undertake formal training outside the university, but for the great majority of bachelors there is little incentive to acquire recognized specialized skills as a basis for a career.

Inevitably, the consequence of only three years of formal training is that there are serious gaps in the organized knowledge of practical matters. A recent illustration can be drawn from the field of civil engineering. A typical British student is likely to make a design study of a single type of bridge during his bachelor's work. During the longer continental course the student should work through studies of the major types of bridge. There can be little doubt which graduate is more competent to advise a client as to the relative merits of different possible solutions to his bridging problem. The example could be multiplied many times over for civil engineering and for many other degree schemes.

The pressure on the syllabus is such that even in a traditional subject such as philosophy the bachelor may well lack a knowledge of some of the major works of some major philosophers. The tendency to incorporate projects into undergraduate schemes has, whatever the general educational merits, militated against a comprehensive structure.

Considerable efforts have been made to educate competent specialists through masters' courses in British universities. But the achievement has fallen short of what is desirable and attainable. Research Councils have done much to encourage students to take masters' degrees, but have been confronted with a bifurcated system of study, in which the student of higher education represents the most numerous members of their class as is recognized in the title of their typical degree the doctor, literally teacher.

It cannot be claimed that holders of British doctorates should be regarded as authorities. The PhD which served very well in its time is now technologically obsolete. Many PhDs lack breadth of knowledge because they have not followed a taught master's course.

Many of the traditional professions have developed careers through which their authorities are matured outside the university system. It is unlikely that they will be replaced. The needs of the public services and of industry can, at least partially, be best met by growth within a university. A man becomes an authority by study and reflection on problems of recognized significance in a sheltered community composed on congenial intellectual with related interests. The process is also, at least in part, a social one. His work is likely to be

most fruitful if he is guided by a scholar of considerable eminence. The PhD has provided the basis for such maturation in the past but is becoming a hurried scramble in reduced circumstances. This is becoming less attractive to good students who are needed to maintain standards.

If quality is to be raised it can best be done by the concentration of masters' courses so that no one university provides courses based on more than half its departments. Each university should have a minimum number of masters' courses allocated to its relatively stronger departments. A measure of the excessive proliferation of masters' courses is that in 1972, the SRC reported with satisfaction that the number of approved courses under its aegis had been reduced from 360 to 320; that is, an average of at most 10 students (half paid for by the SRC) had been raised to 12. As courses are not necessarily confined to one year, it is clear that most are uneconomic. There are also "unapproved" courses that typically cater for smaller numbers. Experience indicates that a minimum economic size for undergraduate courses is 25 to 30. No great upheaval would be required to achieve such numbers for masters' courses. Classes would, on average, treble if at present post-graduates followed one year's taught course.

The specialist who immerses himself in a branch of his discipline for several years can graduate to recognition as an authority. The authority is a person who has by scholarly practice, usually represented by the contribution of new knowledge, established a claim to judge the state of a subject. Modern society depends upon authorities for critical appraisal and the highest levels of professional work in all walks of life, in the law, in research and development, in design, in medical consultancy, in economic matters and in higher education. The authorities are engaged in higher education represent the most numerous members of their class as is recognized in the title of their typical degree the doctor, literally teacher.

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door to the PhD. The marked influx of overseas students for whom, on account of their less-specialized bachelors' courses, the low-level masters' course is ideally suited has tended to confirm the level and pattern of some masters' courses.

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Integrated language courses: a response to academic need or to political expediency?

A paper published last year by the Council for National Academic Awards on the planning of language degree courses in colleges contains the following statement:

"A course may well include language studies which have no planned relationship with other component subjects. Nevertheless, the board considers that even where full integration of subjects is not possible, there is value in helping students to perceive meaningful relationships between the subjects they are studying."

After remarking on the practical and administrative difficulties connected with integration, and encouraging colleges not to be deterred by them, the paper continues:

"Perhaps the most effective integration is achieved where a course is based on the study of a given linguistic society, in such a way that the material used in the language performance component is drawn from aspects of all the other contributory disciplines, whether economic, geographic, historical, literary, political or social. In this way the language element can be seen to act as a genuine integrating factor."

These statements raise several problems for those interested in promoting the study of languages in the context of the social sciences. Among the most immediate are the following:

(1) The paper speaks of "full integration", "effective integration", and later of "valuable integration". The disproportionate influence of the adjectives in determining the meaning of these expressions suggests that the term "integration" in this context is itself in need of some clarification.

(2) In view of the present state of modern language studies in this country, is integration necessary in any empirical sense, or is it merely a desirable feature of an experimental, political or other reasons?

(3) Is an honours degree course the most appropriate level at which to attempt integration?

In trying to arrive at a precise definition of integration we can appeal to the pure and applied sciences for a clear answer: subjects are integrated when the individual elements in a course are based on a common set of concepts or principles which can be expressed or applied in different terms, can complement each other, and can provide the student with an understanding of the individual elements and of the concepts and principles common to all.

This approach is the basis of an integrated study of, say, mathematics and engineering. When applied to the study of languages and social sciences, however, which lack a common theoretical basis, this definition is less helpful.

Sociolinguistics might provide the link, but the CNAAP paper refers directly to language performance, i.e. to proficiency in the language skills, rather than to the study of language as a phenomenon.

Is there another less axiomatic and more appropriate kind of integration which might serve as a model? A glance at the history of modern language studies in Europe shows that until very recently efforts

were made to integrate the study of language, literature, *Landeskunde* of all kinds, and "national character".

However, there are few today who would, for example, regard "the successful regulation of the future: tense with other phenomena as an expression of a certain organizing and generalizing capacity so often seen in German thinkers and administrators" (Priebsch & Collinson, *The German Language*, Fifth edition, revised, 1962).

The Concise Oxford English Dictionary defines integration as the "completion of (imperfect) thing by addition of parts or constituent parts into whole." The first definition is not appropriate to the languages and social sciences framework, since none of the individual elements of study are, in this sense, incomplete. The second definition is, however, more tolerant, indicating that integration can be a matter of perspective.

For our purposes the perspective is that of the planners of an integrated course who, having decided that the integration of languages and social sciences is possible and worthwhile, are now attempting to combine established elements to form a new entity.

As soon as we accept this approach to integration, we enter the realm of value judgments, and we are therefore justified in examining such evidence as can be adduced for or against the introduction of integration as an educational technique.

Can it be shown to be necessary in academic terms, as the most effective way of teaching and learning subjects which, in isolation, are no longer accessible to or in contact with the modern world; or is it proposed merely as a desirable academic experiment? Even the evidence at present available, the latter explanation seems the more likely.

It is a valid argument in educational debate that a certain amount of experimentation is essential in testing the value of an innovation, and for this reason efforts at integration must be given time to mature.

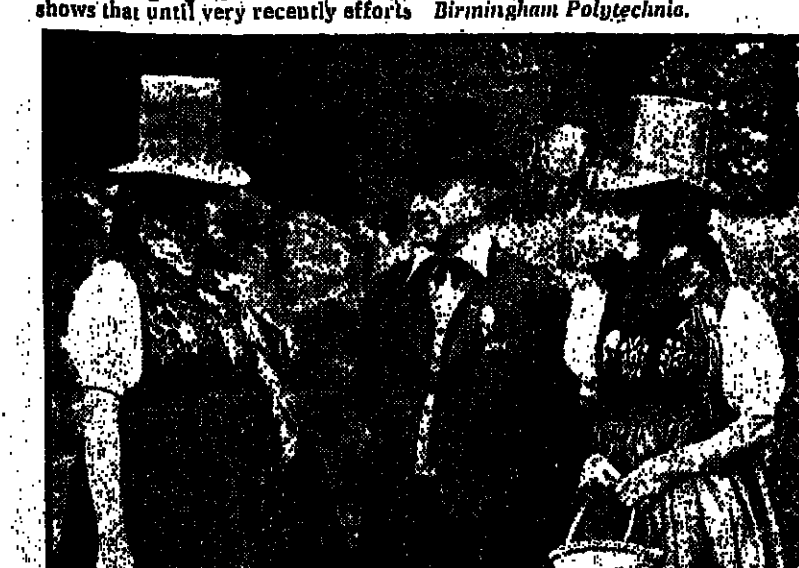
In this respect it seems worth pointing out that integrated studies, being course-orientated rather than subject-orientated, and, of necessity, closely linked to staff resources, are particularly susceptible, both to a stale, unchallenging presentation of received knowledge, and to an ideologically biased interpretation.

In fact, an integrated course of the type outlined in the CNAAP paper could easily be adapted to serve political ends. Since the possibility of this happening is not to be excluded as long as the theoretical basis of integration remains unclarified, and since politicians speak with increasing frequency of the "changing shape of our democracy", this aspect of integration could well repay closer scrutiny.

At any rate, the structure of an integrated course of study should be loose enough to permit a good measure of reflection and argument. If this cannot be guaranteed because of difficulties of coordination, staffing, library provision, etc., then we should ask ourselves seriously whether integration is a suitable basis for degree level work.

Jeffrey Johnson

The author is lecturer in German at Birmingham Polytechnic.



Attempts are made to integrate the study of language with national studies.

Two approaches to evaluating the progress of the National Development Programme for Computer Assisted Learning, a report on whose first two years' work has just been published.

Weighing the costs of computer learning against the benefits

Not many grant-giving bodies have insisted that the recipients of their funds undergo an external financial evaluation during the course of their project. The National Development Programme for Computer-Assisted Learning is probably unique in having imposed such discipline, but the exercise is a salutary one.

Computer-assisted learning (CAL) is a blatant example of an avoidable high-cost technology. One lesson learnt from the recent past is that such projects should be carefully costed so that their resource implications are weighed against their benefits.

While the full rigour of conventional cost-effectiveness analysis is wholly inapplicable, at some stage a value judgment must be made assessing whether the extra cost is worth the educational improvement gained. For this purpose an objective assessment of the resource impact of the introduction of CAL is required.

My firm's appointment as the financial evaluation agency at the outset of the programme allowed the methodology of the evaluation to influence the NDP's own information requirements. Project directors in the national programme have been asked to analyse the time spent by their academic colleagues on the project in various ways.

Statistics are required on the total hours of use of each package developed, on the space implications of their work and on any quantitative changes in the course because of the introduction of computers. I am very fortunate in that projects, after some initial brickbats, are cooperating with the development of the information developed. As a result the data will be available for the conclusions on costs and resources.

My principal objective is to help answer generalized questions on costs. These will range from the simple "What does CAL cost?" to detailed enquiries on issues such as the financial merits of visual display units against graphic display terminals, or the savings to be achieved from inter-institutional projects. In



the next two years a range of questions of this kind will be considered in a series of "Financial Issues Reports."

The costing of educational activity is a difficult and sensitive venture. In some ways it is like measuring an octopus for a suit. There are so many qualitative variables and so few constants; nothing is static and no assumptions gain general approval. The definition of cost is an example of this. "Cost" means one thing to a head of department and has a very different meaning for the finance officer of an institution. The accounting conventions used in a polytechnic are very different from those in a university.

At the national level there are also varying interpretations of what should be included in a "total cost". Thus, in answer to the question "What does CAL cost?" one has to identify at least three levels of reply, to suit the department, the institution and the nation.

Inflation is another problem, but this has been overcome by concentrating on identifying costs in terms

of basic units rather than money. We collect information on the hours of staff time, the square feet used and the hours of terminal connexion to a computer and do not waste effort converting these into today's money terms.

When in due course somebody asks "What will package XYZ cost me?" we can then adjust the units for the enquirer's local circumstances and, if necessary, convert them into a financial figure applicable at the time of the enquiry.

The result of the evaluation work to date, some tentative conclusions can be made about the costs and resource implications of CAL. CAL is certainly more expensive than conventional teaching methods, even where large numbers of students are using the same packages. CAL can appear very cheap to academic departments because the marginal costs which affect departmental budgets are often small.

Since no instances exist of CAL providing more than two hours of instruction per week the effect of CAL on staff workloads will be small.

The time taken to develop CAL is very significant. It is likely to require more than 100 hours of staff time to develop a one hour package (this figure varies according to the content and complexity). Shared or inter-institutional development of packages can produce substantial economies in the total cost. Institutions which operate CAL packages developed elsewhere might be able to provide such teaching at a cost lower than conventional methods.

The data from the evaluation's reaper is still being harvested and winnowed. By the end of 1977 I will be able to provide more substantial evidence on the costs of CAL at all levels so that the difficult decisions on its value—and future—can be set against a quantitative background.

John Fielden

The author is a management consultant with Peat, Marwick, Mitchell and Co.

From project evaluation to public judgment

Educational evaluators can all be relied upon, if they don't drop dead, defect or seize up, to provide some information about the educational activity they have been engaged to study. And that's all you can say about all educational evaluators. The species, although recent in origin and still few in number, is remarkably varied.

This was not true of the first generation, however. They agreed with the people who paid them that what was needed by way of information was some accurate assessments of the effects on learners of trying to teach them something.

The early technology of evaluation was exclusively devoted to this end. All went well until they found that the learners didn't usually learn what they were supposed to learn, or didn't all learn the same things.

This was damned inconvenient, because people began to ask why, and the evaluators couldn't help them because they had confined their efforts to what was learnt.

By the time the second generation came along (we're part of it) everything about evaluation had become problematic—who is it for, what information is relevant, what methods are appropriate, who should do it. On this last point, the National Development Programme for Computer Assisted Learning decided that we should do it, or at least part of it.

Not such a big part, actually, although it's costing them £94,000, and taking four people three years.

The Programme at Two will be available from the Centre for Applied Research in Education, University of East Anglia, from

the programme is saturated with evaluative activity, even discounting ourselves and John Fielden (how does it cope with inflation?).

Projects are required to carry out evaluations of their work, and these are linked to the appraisals of the governing programme committee via mid-term evaluations orchestrated by the director, Richard Hooper. In terms of the evaluation of individual projects, we act as an additional resource, sometimes helping projects to design or carry out their evaluations, sometimes providing accounts of their work for them, or Mr Hooper, and for the committee.

It's important to note (at least we think it is) that these accounts are invariably seen first by the project, and are usually modified to take account of their comments. We do no "secret" evaluation reports to the programme managers about what's going on in the projects, and go out of our way to avoid being labelled as "controversial". (Television addicts may have realised that our acronym is a pun on this very point.)

Nor do we, in these accounts, offer conclusions about the worth of the project, or make recommendations as to whether or not it deserves further support. That is for the committee to decide. Our job is to ensure, as best we can, that they have the information they recognize as relevant and adequate for such decisions.

What else do we do? Well, we provide a check for the outside world on the self-reports and claims made by programme participants. Richard Hooper referred last week to his interim report, *Two Years On*. At the moment we're rushing to finish *The Programme at Two*, which is a companion to *Two Years On*, and a critique of it.

What else? We take perspectives

identifying and exploring issues of concern to participants and outsiders—issues like the educational values and effects of CAL, problems of institutionalization and transferability, or the role of the computer. So does the *Programme at Two* offer alternative analyses of the issues and an outsider's view of the programme as an entity. Our immediate purpose here is to inform the review of programme and project policy; in the longer term we hope to enhance public understanding of the potential and limitations of this new educational tool.

Finally, we see our job as telling the story of the national programme in a way that will make its work accessible to the judgement of the interested people at large. That story will not consist, as the first evaluators might have written it, only of student scores, though it may include such data.

"Education" is not an offshore island inhabited by monofunctional creatures called teachers and learners, and ruled by "disciplinary" forces. It is an activity much like any other, engaged in by people who bring to bear upon its conduct the passions and needs that flow from their complex experience of the personal, social and political worlds in which their activity is inextricably embedded. Discrepancies between "script" and "performance" are rooted in this reality.

The story should be interesting, as well as instructive. Unfortunately, we missed the beginning, and can't stay to the end; but then in an important sense, that's true for everyone. Only Richard Hooper's computers are here to stay!

Barry Palmer

The author is director of the Understanding Computer Assisted Learning project at the University of

New ways with physical science at Surrey

Physical science involves the drawing together of physics and chemistry and, if it is to be contained within the bounds of a normal length curriculum, it must also involve selection of concepts and content from these two subjects. In a sense, it is more general than either physics or chemistry, since it contains aspects of both, but this may not always turn out to be so in a particular curriculum. At sixth-form level, physical science has concentrated on fundamentals—the close relationship between the physical and the chemical, the structure of matter and radiation energy and kinetics. It has tended to omit applications, as well as those aspects which are more separately either "physics" or "chemistry", and in this way it has become less useful in the long run for those who require these subjects as an ancillary to their main subjects. The fact that physical science has become popular with biologists may have been at least as much a matter of administrative convenience—two subjects for the price of one A-level—as of detailed suitability.

However, the border between physics and chemistry has become increasingly difficult to maintain, and this is

also in such applications as spectroscopy and crystallography. Viewed like this, physical science should be a specialist study which aims to integrate and systematize the overlap between physics and chemistry. In a world belovied by academics, it has the makings of a new discipline. This is the way it is treated in universities, where it has joined other recent arrivals such as geophysics or biochemistry. It is a commonplace that progress in science is often greatest on the border between two adjacent disciplines, and the next step in this process is that it creates a new discipline with its own identity and borders, across the borders of the old disciplines.

At the same time, it has maintained some of the features of a general subject. Advocates of general degrees emphasize the needs of the services for people who have a broad understanding of several disciplines, and anyone with a physical science degree certainly has that for both physics and chemistry. If he is to be a truly informed scientist, and this will be increasingly necessary for our decision makers, he will need a broader education, stretching perhaps into the biol-

ogy required of many of our science teachers, those who will primarily be engaged in the education of future citizens rather than in the production of future specialists.

All this has been taken into consideration for a new curriculum that is being developed at the University of Surrey.

I had also been heavily involved in two other curriculum developments, which proved to be highly pertinent to this new task. The first of these was a course in science education, which was to be offered concurrently with a science subject in a joint honours course, and the second was a course in science and society, which could form part of any science course. It very soon became apparent that an opportunity had presented itself not only to draw the three curriculum developments together, but to link them to others in the humanities and social sciences, which were proceeding at the same time in the university. This has resulted in the modular degree scheme in combined studies in science, to be offered for the first time in October, 1975. The scheme covers physical science, computing science, business studies, science education, business economics, philosophy,

linguistics and regional studies. It is hoped that biological science may be added in due course. Students will be admitted into the scheme as a whole and will study one of three different types of course. First, purely physical science in a single subject honours programme. Secondly, physical science in combination with one of the subjects listed above in a joint honours programme. Thirdly, physical science with more than one of these subjects in a combined honours programme.

We hope that the scheme will prove attractive not only to students with A levels in science subjects, but also to those with mixed A levels in the arts and sciences, and for this reason some of the initial teaching will be offered on an individualized basis, though self-paced instruction. This will make it possible to adjust learning to individual needs and to make due allowance both for students' strengths and weaknesses. The considerable experience of the Institute for Educational Technology should prove very helpful, and we intend to use many of the materials at present being developed by various international projects and elsewhere. Altogether, innovations in teaching

many aspects of the new programme. These will include group activities and individual projects and much of the student assessment will be based on factors other than examinations.

One result of building the scheme around a core of work in physical science is that it gives the students a sense of continuity, something which has been lacking in the hitherto fragmented curriculum. For that reason too, each student will be initially enrolled in a chemical physics department, which has a member of staff from the department as its permanent representative. What we expect for our students' past experience has shown that students from the physical sciences have found "ready-made" and in teaching, while those who wished have found research opportunities in the borderland between physics and chemistry. All this more should be available to our new programme.

L. R. B. Ellis

The author is Professor of Educational Technology at Surrey University.

NOTICE BOARD

Chairs

Dr Martin Black, at present reader in biomedical engineering and chairman, graduate division of biomedical engineering, University of Sussex, has been appointed to the chair of medical physics in the academic division of medicine of the University of Sheffield from October 1.

Dr William Pavvett, of the Royal Radar Establishment, has been appointed professor of electronic engineering, University of Sheffield, for three years from this month.

Mr John Carey, lecturer in English and Fellow of St John's College, Oxford University, has been promoted to the Merion professorship of English literature.

Dr Richard Whitfield, lecturer in the department of education, University of Cambridge, has been appointed professor and head of the department of education, Aston University, from September 1.

Fortcoming events

"Lyell Whitehead Centenary", a summer exhibition being held at King's College London until September 10, is designed to show the life and work of two professors of the college, Sir Charles Lyell (1797-1875) and Sir Charles Whitehead (1882-1975). The exhibition attempts to show the way these two scientific pioneers developed the ideas which in very different ways, were in revolutionary their own sciences, geology and physics. Open Monday-Friday, 10.45-3.00 admission free.

Course news

The biology department of the University of Stirling will be offering a postgraduate MSc course in aquaculture and fishery management from September, 1976. The course will cover all aspects of fish and shellfish farming, both marine and freshwater, and a management component will be provided by the department of industrial science. Enquiries will be sent on separate marine and freshwater farming as well as on tropical systems.

Correction

A conference "The Role of Education Studies in New Organizational Structures" was advertised last week as taking place on September 16. There is no such conference.

Open University programmes July 19 to 25

Saturday July 19

RADIO 4 (VHF)

7.40 Ecology: Desert ecology (B3A1; 1975; 1976; 1977; 1978; 1979; 1980; 1981; 1982; 1983; 1984; 1985; 1986; 1987; 1988; 1989; 1990; 1991; 1992; 1993; 1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019; 2020; 2021; 2022; 2023; 2024; 2025; 2026; 2027; 2028; 2029; 2030; 2031; 2032; 2033; 2034; 2035; 2036; 2037; 2038; 2039; 2040; 2041; 2042; 2043; 2044; 2045; 2046; 2047; 2048; 2049; 2050; 2051; 2052; 2053; 2054; 2055; 2056; 2057; 2058; 2059; 2060; 2061; 2062; 2063; 2064; 2065; 2066; 2067; 2068; 2069; 2070; 2071; 2072; 2073; 2074; 2075; 2076; 2077; 2078; 2079; 2080; 2081; 2082; 2083; 2084; 2085; 2086; 2087; 2088; 2089; 2090; 2091; 2092; 2093; 2094; 2095; 2096; 2097; 2098; 2099; 2100; 2101; 2102; 2103; 2104; 2105; 2106; 2107; 2108; 2109; 2110; 2111; 2112; 2113; 2114; 2115; 2116; 2117; 2118; 2119; 2120; 2121; 2122; 2123; 2124; 2125; 2126; 2127; 2128; 2129; 2130; 2131; 2132; 2133; 2134; 2135; 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BOOKS

Organisms' environment

J. D. Curr

1. *Chlorophyll a* (Chl *a*)